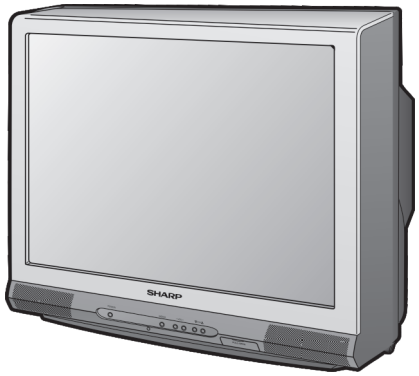
SHARP SERVICE MANUAL



COLOR TELEVISION

Chassis No. GB-3D

MODEL 27SF56B

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

CONTENTS

Page

- ELECTRICAL SPECIFICATIONS 1
- IMPORTANT SERVICE SAFETY PRECAUTION 2
- LOCATION OF USER'S CONTROL 5
- INSTALLATION AND SERVICE INSTRUCTIONS 6
- SERVICE ADJUSTMENT 10
- CHASSIS LAYOUT 14
- BLOCK DIAGRAM 15
- DESCRIPTION OF SCHEMATIC DIAGRAMS & WAVEFORMS 16
- SCHEMATIC DIAGRAMS 17
- PRINTED WIRING BOARD ASSEMBLIES 24
- PARTS LIST 29
- PACKING OF THE SET 38

ELECTRICAL SPECIFICATIONS

POWER INPUT ..... 120V AC, 60 Hz
POWER RATING 140W
PICTURE SIZE ..... 2,193.5 cm^2 (339sq inch)
CONVERGENCE ..... Magnetic
SWEEP DEFLECTION ..... Magnetic
FOCUS ..... Hi-Bi-Potential Electrostatic
INTERMEDIATE FREQUENCIES
Picture IF Carrier Frequency ..... 45.75 MHz (Analog Terrestrial)
Sound IF Carrier Frequency ..... 41.25 MHz (Analog Terrestrial)
Color Sub-Carrier Frequency ..... 42.17 MHz (Analog Terrestrial)
IF Center Frequency ..... 44 MHz (Digital Terrestrial)
(Nominal)
AUDIO POWER
OUTPUT RATING ..... 5.0W + 5.0W (at 10% distortion and Dual CH Operate)

SPEAKER
SIZE ..... 12 x 6 cm oval (2 pcs.)
VOICE COIL IMPEDANCE ..... 8 ohm at 400 Hz
ANTENNA INPUT IMPEDANCE
VHF/UHF ..... 75 ohm Unbalanced
TUNING RANGES
VHF-Channels ..... 2 thru 13
UHF-Channels ..... 14 thru 69
CATV Channels ..... 1 thru 125
Digital Terrestrial Broadcast (VHF/UHF) ..... 2 thru 69
(EIA, Channel Plan U.S.A.)

Specifications are subject to change without prior notice.

SHARP CORPORATION

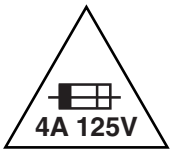
This document has been published to be used for after sales service only.
The contents are subject to change without notice.

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.
   To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 4A-125V FUSE.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.
   It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter.
   The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.
   Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

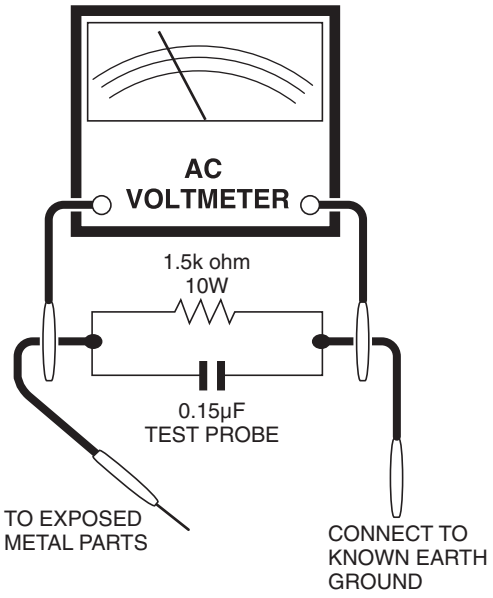
BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.
  All checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)
  Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

Precautions for using lead-free solder

1 Employing lead-free solder
"PWBs" of this model employs lead-free solder. The LF symbol indicates lead-free solder, and is attached on the PWBs and service manuals. The alphabetical character following LF shows the type of lead-free solder.
Example:

Indicates lead-free solder of tin, silver and copper.

2 Using lead-free wire solder
When fixing the PWB soldered with the lead-free solder, apply lead-free wire solder. Repairing with conventional lead wire solder may cause damage or accident due to cracks.
As the melting point of lead-free solder (Sn-Ag-Cu) is higher than the lead wire solder by 40°C, we recommend you to use a dedicated soldering bit, if you are not familiar with how to obtain lead-free wire solder or soldering bit, contact our service station or service branch in your area.

3 Soldering
As the melting point of lead-free solder (Sn-Ag-Cu) is about 220°C which is higher than the conventional lead solder by 40°C, and as it has poor solder wettability, you may be apt to keep the soldering bit in contact with the PWB for extended period of time. However, since the land may be peeled off or the maximum heat-resistance temperature of parts may be exceeded, remove the bit from the PWB as soon as you confirm the steady soldering condition.
Lead-free solder contains more tin, and the end of the soldering bit may be easily corroded. Make sure to turn on and off the power of the bit as required.
If a different type of solder stays on the tip of the soldering bit, it is alloyed with lead-free solder. Clean the bit after every use of it.
When the tip of the soldering bit is blackened during use, file it with steel wool or fine sandpaper.

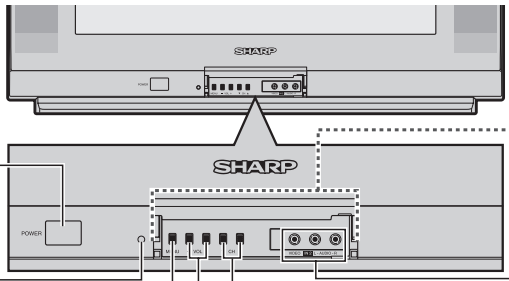
Be careful when replacing parts with polarity indication on the PWB silk.

Lead-free wire solder for servicing

Part No.	★	Description		Code
ZHNDAi123250E	J	ϕ0.3mm	250g(1roll)	BL
ZHNDAi126500E	J	ϕ0.6mm	500g(1roll)	BK
ZHNDAi12801KE	J	ϕ1.0mm	1kg(1roll)	BM

LOCATION OF USER'S CONTROL

Front Panel



POWER
Press → On.
Press again → Off.

REMOTE CONTROL SENSOR

MENU
Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.

CHANNEL UP/DOWN
(▲) Selects next higher channel.
(▼) Selects next lower channel.

INSIDE DOOR

VIDEO/AUDIO IN 2 TERMINALS

Basic Remote Control Functions

POWER
Press → On.
Press again → Off.

REMOTE KEYPAD (0 - 9)
Sets the channel.

FLASHBACK
Returns to previous channel.
• (DOT)
Sets the channel.

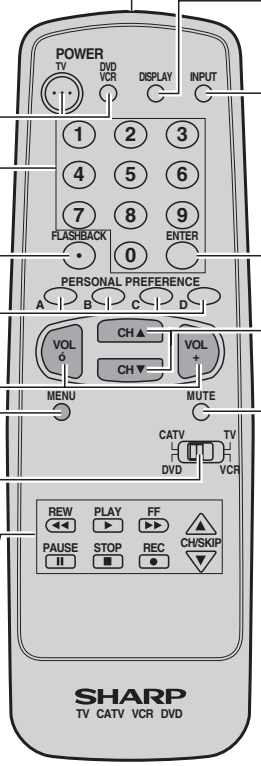
PERSONAL PREFERENCE
With the Personal Preference buttons, you can program your favorite programs by using the 4 categories A, B, C and D. The channels can be accessed quickly by using these buttons.

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.
• Changes or selects the TV adjustments on On-Screen Display.

MENU
Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

CATV/DVD-TV/VCR MODE SELECT SWITCH
In TV/VCR position, signals sent will be for TV and VCR control.
In CATV/DVD position, signals sent will be for cable TV converter and DVD control.

DVD/VCR CONTROL



Infrared Transmitter Window

DISPLAY
Press → Displays receiving channel for 4 seconds.
Press again → Removes display.
• Temporarily displays receiving channel when in Closed Caption mode.

INPUT
Press → Switches to external video INPUT 1 mode.
Press twice → Switches to external video INPUT 2 mode.
Press 3 times → Switches to external video INPUT 3 mode or COMPONENT mode.
Press 4 times → Switches back to the original TV mode.

ENTER
• Used to confirm the channel selection and Personal Preference channel.
• Used in some instances where a Cable Converter Box requires an "enter" command after selecting channels, when using the REMOTE KEYPAD button.

CHANNEL UP/DOWN
(▲) Selects next higher channel.
(▼) Selects next lower channel.
• Moves the " ● " mark on the MENU screens.

MUTE
Press → Mutes sound.
Press again → Restores sound.

Note:

- The above shaded buttons on the Remote Control glow in the dark. To use the glow-in-the-dark display on the remote control, place it under a fluorescent light or other lighting.
- The phosphorescent material contains no radioactive or toxic material, so it is safe to use.
- The degree of illumination will vary depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to charge the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.
- The TV set and remote control illustrations and the on-screen displays in this manual may differ from their actual appearance.

INSTALLATION AND SERVICE INSTRUCTIONS

Note: (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
(2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 4.0A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP653 (P651 Pin3) and make sure that the voltmeter reads 13.85 ±0.6V DC.
5. Apply external 17.3V DC at TP653 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord (about 1min.) and plug the AC cord power on. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "V11" and Bus data "01" (Y-mute on, CRT Cut Off).
4. The voltage should be below 31.5kV (at zero beam). If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-B" to determine, if service adjustments are required.

1. Service mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

2. Service number selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "V01" to "M05". Select the item you wish to adjust.

3. Data number selection

Press the Vol-up or Vol-down button to adjust the data number.

To enter the service mode and exit service mode.

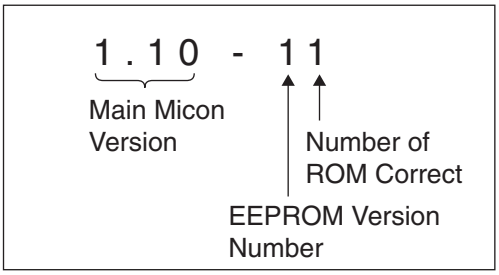
To enter the service mode manually just press and hold the Vol-down and Ch-up buttons at the same time, plug the AC cord into a wall socket.
Now the TV set is switched on and enters the service mode.
To exit the service mode, turn the television off by pressing the power button.

4. Donau and Main Micon version Check

1. After television power on, press test key “0x31” and the following screen will display.

VERSION NUMBER	
ANALOG	: 1.10-11
DIGITAL	: 1.10
DIGITAL OS	: 0400140P-007

* ANALOG – Main Micon IC (RH-IXB644WJQZQ) Software Version



* DIGITAL – Donau IC (Inside Tuner) Software Version

2. The version display screen will disappear after 30 second or pressing any key (except test key) will cancel the version display.

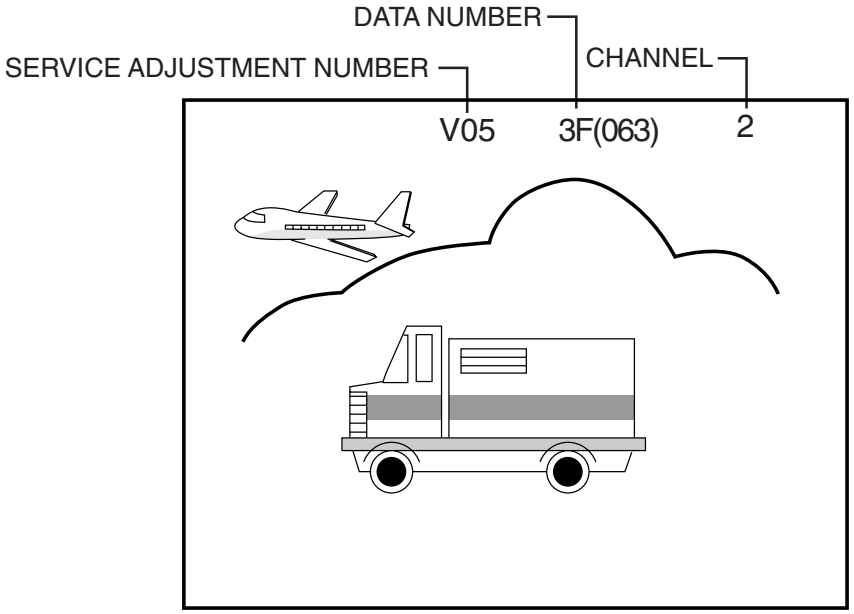


Figure A.

A. VCJ IC ADJUSTMENT

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
V01	PICTURE	0-15 (00h-0Fh)	08 (08h)		
V02	TINT	0-127 (00h-7Fh)	66 (42h)		
V03	COLOR	0-127 (00h-7Fh)	56 (38h)		
V05	BRIGHT	0-127 (00h-7Fh)	64 (40h)		
V06	R CUT-OFF	64-255 (40h-FFh)	64 (40h)		
V07	G CUT-OFF	64-255 (40h-FFh)	64 (40h)		
V08	B CUT-OFF	64-255 (40h-FFh)	64 (40h)		
V09	G/R DRIVE	0-127 (00h-7Fh)	64 (40h)		
V10	B DRIVE	0-127 (00h-7Fh)	64 (40h)		
V11	Y-MUTE/V-STOP	0-2	00 (00h)	Y-Mute / Horizontal "—"	
V12	SHARP	0-63 (00h-3Fh)	50 (32h)		32
V13	DC RESTORATION	0-3 (00h-03h)	02 (02h)		02
V14	BLACK STRETCH	0-3 (00h-03h)	02 (02h)		02
V15	ABL START POINT	0-3 (00h-03h)	03 (03h)		03
V16	ABL GAIN	0-3 (00h-03h)	02 (02h)		02
V17	γ POINT	0-3 (00h-03h)	00 (00h)		00
V19	ENERGY SAVE	0-63 (00h-3Fh)	63 (3Fh)	Offset	3F
V24	LOW-G	0-255 (00h-FFh)	12 (0Ch)	Color Temp.	0C
V25	LOW-B	0-255 (00h-FFh)	241 (F1h)	Color Temp.	F1
V26	ML-G	0-255 (00h-FFh)	00 (00h)	Color Temp.	00
V27	ML-B	0-255 (00h-FFh)	247 (F7h)	Color Temp.	F7
V28	HIGH-G	0-255 (00h-FFh)	02 (02h)	Color Temp.	02
V29	HIGH-B	0-255 (00h-FFh)	08 (08h)	Color Temp.	08
V30	WPL	0-1	01 (01h)		01
V31	RGB CONTRAST	0-63 (00h-3Fh)	59 (3Bh)		3B
V34	VSM GAIN	0-3 (00h-03h)	01 (01h)		01
V36	BPF/TOF-INPUT	0-1	00 (00h)	External Input	00
V37	CORING	0-1	00 (00h)		00
V38	VSM PHASE	0-1	00 (00h)		00
V39	COLOR γ	0-1	00 (00h)		00
V40	SHARP-INPUT	0-63 (00h-3Fh)	44 (2Ch)	External Input	2C
V41	TINT-INPUT	0-127 (00h-7Fh)	62 (3Eh)	External Input	3E
V42	PICTURE-COMPONENT	0-15 (00h-0Fh)	6 (06h)	Component Input	
V43	TINT-COMPONENT	0-127 (00h-7Fh)	62 (3Eh)	Component Input	3E
V44	COLOR-COMPONENT	0-127 (00h-7Fh)	72 (48h)	Component Input	48
V45	BRIGHT-COMPONENT	0-127 (00h-7Fh)	84 (54h)	Component Input	
V46	R CUT OFF-COMPONENT	64-255 (40h-FFh)	64 (40h)	Component Input	
V47	G CUT OFF-COMPONENT	64-255 (40h-FFh)	64 (40h)	Component Input	
V48	B CUT OFF-COMPONENT	64-255 (40h-FFh)	64 (40h)	Component Input	
V49	G/R DRIVE-COMPONENT	0-127 (00h-7Fh)	64 (40h)	Component Input	
V50	B DRIVE-COMPONENT	0-127 (00h-7Fh)	64 (40h)	Component Input	
V51	SHARP-COMPONENT	0-63 (00h-3Fh)	44 (2Ch)	Component Input	2C
V52	TINT-S	0-127 (00h-7Fh)	62 (3Eh)	S-Terminal Input	3E
V53	C-TRAP	0-1 (00h-01h)	00 (00h)		00
V59	AUTO FRESH	0-1 (00h-01h)	00 (00h)		00
V60	SHARP P F	0-1 (00h-01h)	01 (01h)		01
V61	CD MATRIX	0-3 (00h-03h)	02 (02h)		02
V62	B-Y ATT	0-1 (00h-01h)	00 (00h)		00
V63	R-Y ATT	0-1 (00h-01h)	00 (00h)		00
V64	CD MATRIX-COMPONENT	0-3 (00h-03h)	00 (00h)	Component Input	00
V65	B-Y ATT-COMPONENT	0-1 (00h-01h)	00 (00h)	Component Input	00
V66	R-Y ATT-COMPONENT	0-1 (00h-01h)	00 (00h)	Component Input	00
V67	BUZZ	0-1 (00h-01h)	01 (01h)		01
V68	RGB ABCL	0-1 (00h-01h)	01 (01h)		01
V69	PICTURE-VCOMP	0-100 (00h-64h)	47 (2Fh)	16:9 Format (Offset)	2F
V70	COLOR-VCOMP	0-100 (00h-64h)	50 (32h)	16:9 Format (Offset)	32
V71	BRIGHT-VCOMP	0-100 (00h-64h)	51 (33h)	16:9 Format (Offset)	33
V72	PICTURE-DTV	0-15 (00h-0Fh)	06 (06h)	Digital CH	
V73	TINT-DTV	0-127 (00h-7Fh)	71 (47h)	Digital CH	47
V74	COLOR-DTV	0-127 (00h-7Fh)	96 (60h)	Digital CH	60
V75	BRIGHT-DTV	0-127 (00h-7Fh)	84 (54h)	Digital CH	
V76	R CUT OFF-DTV	64-255 (40h-FFh)	64 (40h)	Digital CH	
V77	G CUT OFF-DTV	64-255 (40h-FFh)	64 (40h)	Digital CH	
V78	B CUT OFF-DTV	64-255 (40h-FFh)	64 (40h)	Digital CH	
V79	G/R DRIVE-DTV	0-127 (00h-7Fh)	64 (40h)	Digital CH	
V80	B DRIVE-DTV	0-127 (00h-7Fh)	64 (40h)	Digital CH	
V81	SHARP-DTV	0-63 (00h-3Fh)	44 (2Ch)	Digital CH	2C
V82	CD MATRIX-DTV	0-3 (00h-03h)	00 (00h)	Digital CH	00
V83	B-Y ATT-DTV	0-1 (00h-01h)	00 (00h)	Digital CH	00
V84	R-Y ATT-DTV	0-1 (00h-01h)	00 (00h)	Digital CH	00
R01	RF-AGC	0-63 (00h-3Fh)	36 (24h)		24
R03	RF-AGC REF	0-255 (00h-FFh)	170 (AAh)	Standard value for the self-adjust.	AA

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
D01	V POSITION	0-7 (00h-07h)	00 (00h)		
D02	H POSITION	0-31 (00h-1Fh)	15 (0Fh)		
D03	V SIZE	0-127 (00h-7Fh)	89 (59h)		
D04	H SIZE	0-63 (00h-3Fh)	36 (24h)		
D05	V-LINEARITY	0-15 (00h-0Fh)	08 (08h)		
D06	V-S CORRECTION	0-15 (00h-0Fh)	13 (0Dh)		
D07	EW PARABOLA	0-63 (00h-3Fh)	43 (2Bh)		
D08	EW TRAPEZIUM	0-63 (00h-3Fh)	36 (24h)		
D10	AFC GAIN	0-3 (00h-03h)	02 (02h)		02
D11	V EHT	0-7 (00h-07h)	06 (06h)		
D12	H EHT	0-7 (00h-07h)	06 (06h)		
D13	EW CORNER	0-31 (00h-1Fh)	08 (08h)		
D14	EW CORNER BOTTOM	19-81 (13h-51h)	50 (32h)	Offset toward D13	
D15	NOISE DET LEVEL	0-3 (00h-03h)	00 (00h)		00
D18	V CENTERING	0-63 (00-3Fh)	36 (24h)		
D19	V-AGC	0-1 (00h-01h)	00 (00h)		00
D20	V POSITION-VCOMP	0-7 (00h-07h)	00 (00h)	16:9 Format	00
D21	H POSITION-VCOMP	0-31 (00h-1Fh)	15 (0Fh)	16:9 Format	
D22	V SIZE-VCOMP	0-127 (00h-7Fh)	52 (34h)	16:9 Format	
D23	H SIZE-VCOMP	0-63 (00h-3Fh)	36 (24h)	16:9 Format	
D24	V-LINEARITY-VCOMP	0-15 (00h-0Fh)	08 (08h)	16:9 Format	08
D25	V-S CORRECTION-VCOMP	0-15 (00h-0Fh)	10 (0Ah)	16:9 Format	0A
D26	EW PARABOLA-VCOMP	0-63 (00h-3Fh)	22 (16h)	16:9 Format	
D27	EW TRAPEZIUM-VCOMP	0-63 (00h-3Fh)	35 (23h)	16:9 Format	
D28	V EHT-VCOMP	0-7 (00h-07h)	06 (06h)	16:9 Format	06
D29	H EHT-VCOMP	0-7 (00h-07h)	06 (06h)	16:9 Format	06
D30	EW CORNER-VCOMP	0-31 (00h-1Fh)	12 (0Ch)	16:9 Format	
D31	EW CORNER BOTTOM-VCOMP	19-81 (13h-51h)	50 (32h)	Offset toward D30	32
D32	V BLK UPPER-VCOMP	0-3 (00h-03h)	02 (02h)	16:9 Format	02
D33	V BLK LOWER-VCOMP	0-3 (00h-03h)	02 (02h)	16:9 Format	02
D34	V CENTERING-VCOMP	0-63 (00h-3Fh)	36 (24h)	16:9 Format	24

B. SPECIAL SETTING

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
EX1	FAO VOLUME	0-50 (00h-32h)	36 (24h)		24
EX2	CC-POSITION	0-127 (00h-7Fh)	27 (1Bh)		
EX3	INT	0-255 (00h-FFh)	122 (7Ah)	Interrupt period adjustment	7A
EX4	A-ATT	0-127 (00h-7Fh)	90 (5Ah)		5A
EX5	TUNER data	0-3 (00h-03h)	00 (00h)		00
EX6	Think chip-Slice LEVEL	0-255 (00h-FFh)	54 (36h)		36
EX7	RLY DELAY TIME	0-255 (00h-FFh)	00 (00h)	For the power control	00
EX8	ADG ON TIME	0-255 (00h-FFh)	10 (0Ah)	For the power control	0A

C. OPTION SETTING

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
OP1	OPTION1	0-255 (00h-FFh)	213 (D5h)		D5
OP2	OPTION2	0-255 (00h-FFh)	60 (3Ch)		
OP3	OPTION3	0-255 (00h-FFh)	143 (8Fh)		

D. SOUND ADJUSTMENT

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		NOTES	FIXED VALUE (HEX)
		RANGE	INITIAL VALUE		
M01	INPUT LEVEL	0-15 (00h-0Fh)	07 (07h)		07
M02	MTS VCO	0-63 (00h-3Fh)	38 (26h)		26
M03	FILTER	0-63 (00h-3Fh)	36 (24h)		24
M04	WIDEBAND	0-63 (00h-3Fh)	28 (1Ch)		1C
M05	SPECTRAL	0-63 (00h-3Fh)	23 (17h)		17

Holding down both the VOL-up and CH-up buttons on the TV set at service mode for more than 2 seconds will automatically write the above initial values into IC2101.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
IC2001		X	Data is stored in IC2101.
IC201	X		The adjustment is needed to compensate for characteristics of parts including IC201 and MTS level (M01).
IC2101	X		Holding down both the VOL-up and CH-up buttons on the TV set in the service mode for more than 2 seconds will automatically write the above initial values into IC2101 Then perform a complete adjustment.
CRT	X		Adjust items related to picture tube only.
IC3001	X		Adjust items related to MTS only (M01~M05).

SERVICE ADJUSTMENT

RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "R01".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.
   Note 1 : You will have to come out of the service mode to select another channel.
   Note 2 : Setting the data to "00" will produce a black raster.

Screen Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set the data value to "00" to set the color level to minimum. (Record original data code under adjustment "V03" before changing) You may skip this step, if you selected a B/W picture or monoscope pattern.
3. Select the service adjustment "V11" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
4. Adjust the master screen control until the raster darkness to the point where raster is barely seen.
5. Adjust the service adjustments "V06" red, "V07" green and "V08" blue to obtain a good grey scale with normal whites at low brightness level.
6. Select the service adjustment "V11" and reset data to "00". Select the service adjustment "V03" and reset data to obtain normal color level.
7. For component input, the data value of "V46" red, "V47" green and "V48" blue is adjusted to follow the data value of "V06", "V07" and "V08" respectively.
8. For digital RF input, the data value of "V76" red, "V77" green and "V78" blue is adjusted to follow the data value of "V06", "V07" and "V08" respectively.
9. Reset the master screen control to obtain normal brightness range.

White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set to "00" (minimum color) (Record original data code under adjustment "V03" before changing). "V03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service adjustment data of "V09" and "V10" until a good grey scale with normal whites is obtained. (RF Input)
4. For component input, the data value of "V49" and "V50" is adjusted to follow the data value of "V09" and "V10" respectively.
5. For digital RF input, the data value of "V79" and "V80" is adjusted to follow the data value of "V09" and "V10" respectively.
6. Select the service adjustment "V03" and reset data to obtain normal color level.

Sub-picture and Sub-Bright Adjustments

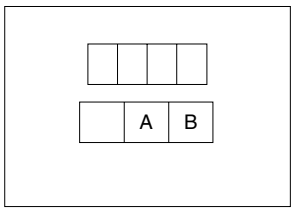
1. Receive the window pattern signal.

• RF INPUT (TU1101)

2. Get into service adjustment data "V01" and "V05" and set the luminance as shown in figure "A" and "B" as below respectively.

• COMPONENT INPUT

3. Get in service adjustment data "V42" and "V45" and set the luminance as shown in figure "A" and "B" as below respectively.



LUMINESCENCE CONFIRMATION
A: 120±10cd/m^2
B: 1.5±0.5cd/m^2

• DIGITAL RF INPUT (TU1101)

4. Get in service adjustment data "V72", "V75".
   4-1 Input data of “V72” = “V01” + 01h
   4-2 Input data of “V75” = “V05” - 01h

Sub-Tint Adjustment

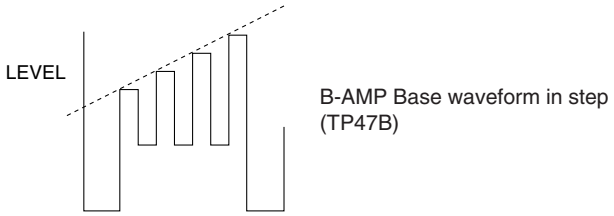
1. Receive the half color bar signal.

• RF INPUT (TU1101)

2. Get into Y-Mute by R/C, or by setting the "V11" bus data to "01".
3. Vary the "V02" bus data until the waveform becomes as stated below.

• Component Input and Digital RF Input (TU1101)

4. Input data of "V43" = 3Eh
5. Input data of "V73" = 47h



B-AMP Base waveform in step (TP47B)

Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .

• RF INPUT (TU1101)

3. Enter the service mode and select service adjustment "V03".
4. Adjust "V03" data value to obtain a normal color level.

• Component Input and Digital RF

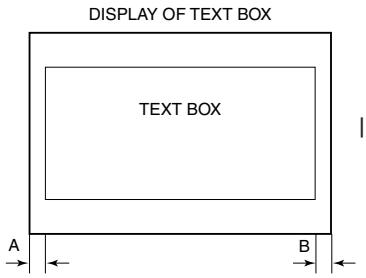
5. Input data of “V44” = 48h
6. Input data of “V74” = 60h

Focus Adjustment

1. Receive a good local channel.
2. Adjust the FOCUS VR of the flyback transformer to make the image as fine as possible.

C. C Display Position Adjustment

1. Receive the lion head pattern signal.
2. Select "EX2" to display the text box.
3. Adjust the "EX2" bus data to let the text box displayed in the center.



| A-B | / 2

SPEC INSPECTION:| A-B | / 2 ≦ 5mm

Vertical-Size and Linearity Adjustments

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D03" for V-size.
3. Adjust the "D03" bus data to get the proper V-size.
4. For V-linearity adjustment, select data bus "D05" and adjust to get the proper vertical linearity.

(SCREEN FORMAT 16:9)

5. Input data of "D22" to mines 38 step from "D03” data. (V-SIZE)
6. Input data of "D24" same as "D05" data. (V-LIN)

Note: Aging for 10 min before adjustment. After the adjustment of V-center and V-size, re-adjustment for this V-line.

Vertical Phase Adjustment

(SCREEN FORMAT 4:3)

1. Enter the service mode and input data of “00h” on "D01".
2. Adjust "D18" data value so that picture is centered.

(SCREEN FORMAT 16:9)

3. Input data of "00h" on "D20".
4. Input data of "D34" same as "D18" data.

Horizontal Position Adjustment

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D02".
3. Adjust "D02" data value so that picture is centered.

(SCREEN FORMAT 16:9)

4. Input data of "D21" same as "D02" data.

Horizontal-Size Adjustment

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D04" for H-size.
3. Adjust the "D04" bus data to get the proper H-size.

(SCREEN FORMAT 16:9)

4. Input data of "D23" same as "D04" data.

EW-Parabola

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D07" for EW parabola.
3. Adjust the "D07" bus data to get the proper vertical straight line for both left and right side.

(SCREEN FORMAT 16:9)

4. Input data of "D26" to minus 17 step from "D07" data.

EW-Trapezium

1. Receive a good local channel.

(SCREEN FORMAT 4:3)

2. Enter the service mode and select the service adjustment "D08" for EW-Trapezium.
3. Adjust the "D08" bus data to get the best position display.

(SCREEN FORMAT 16:9)

4. Input data of "D27" same as "D08" data.

■ MTS ADJUSTMENT

MTS Level Adjustment

1. Set the sound volume above 1.
   Monoral signal: 400Hz, 100% modulation
2. Confirm "EX4" data is "5Ah".
3. Vary the "M01" bus data until the voltage to pin (39) of IC3001 to become the value as stated below.
   SETTING VOLTAGE
   ADJ spec : 490±10mVrms
   CHK spec: 490±20mVrms

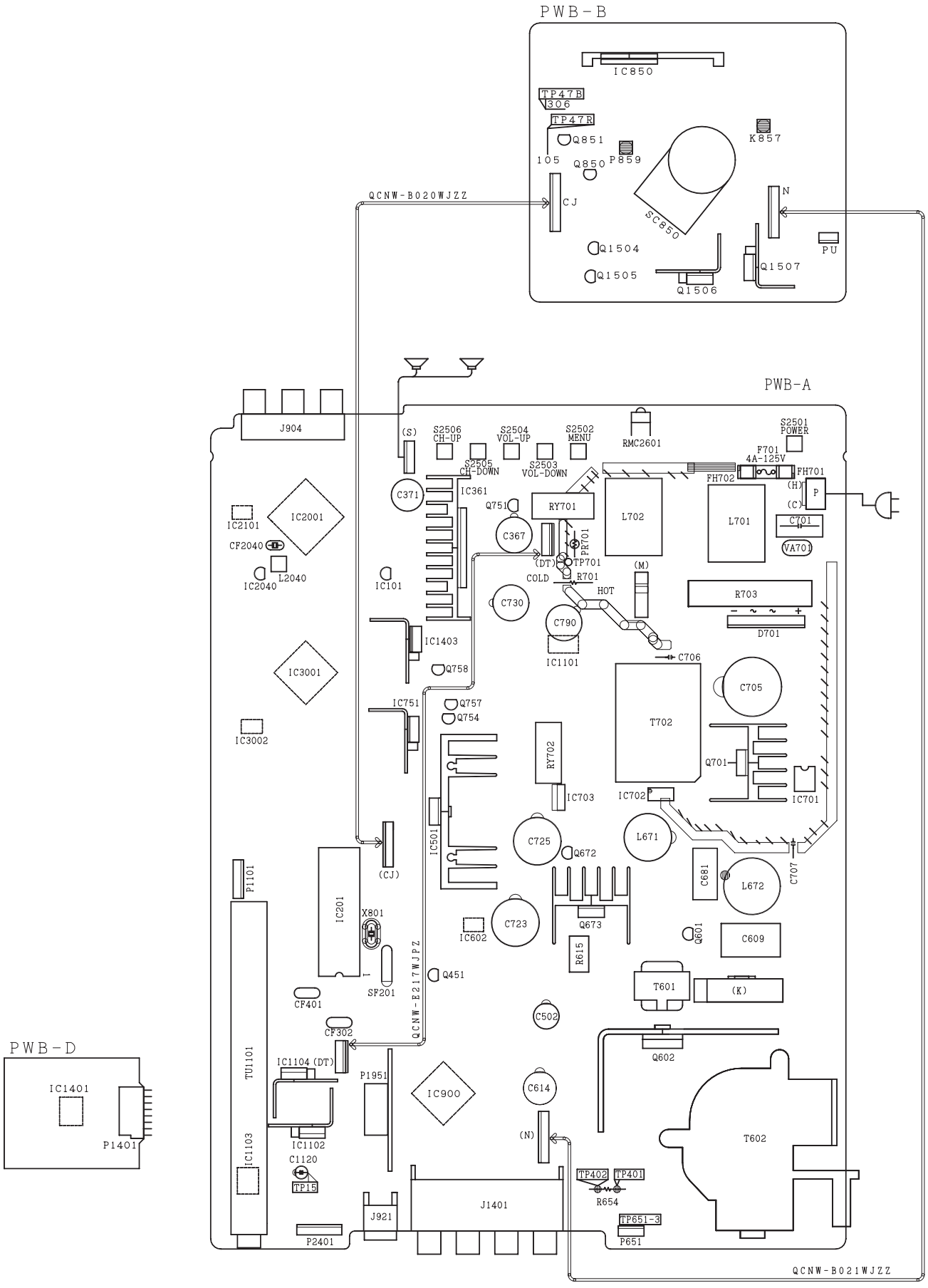
Separation Adjustment

1. Input "SIGNAL 1" and vary the "M04" bus data to get the minimun AC voltage to pin (39) of IC3001.
2. Input "SIGNAL 2" and vary the "M05" bus data to get the minimun AC voltage to pin (39) of IC3001.
   SIGNAL 1: 300Hz, 30% modulation, Lch only, NR-ON
   SIGNAL 2: 3kHz, 30% modulation, Lch only, NR-ON

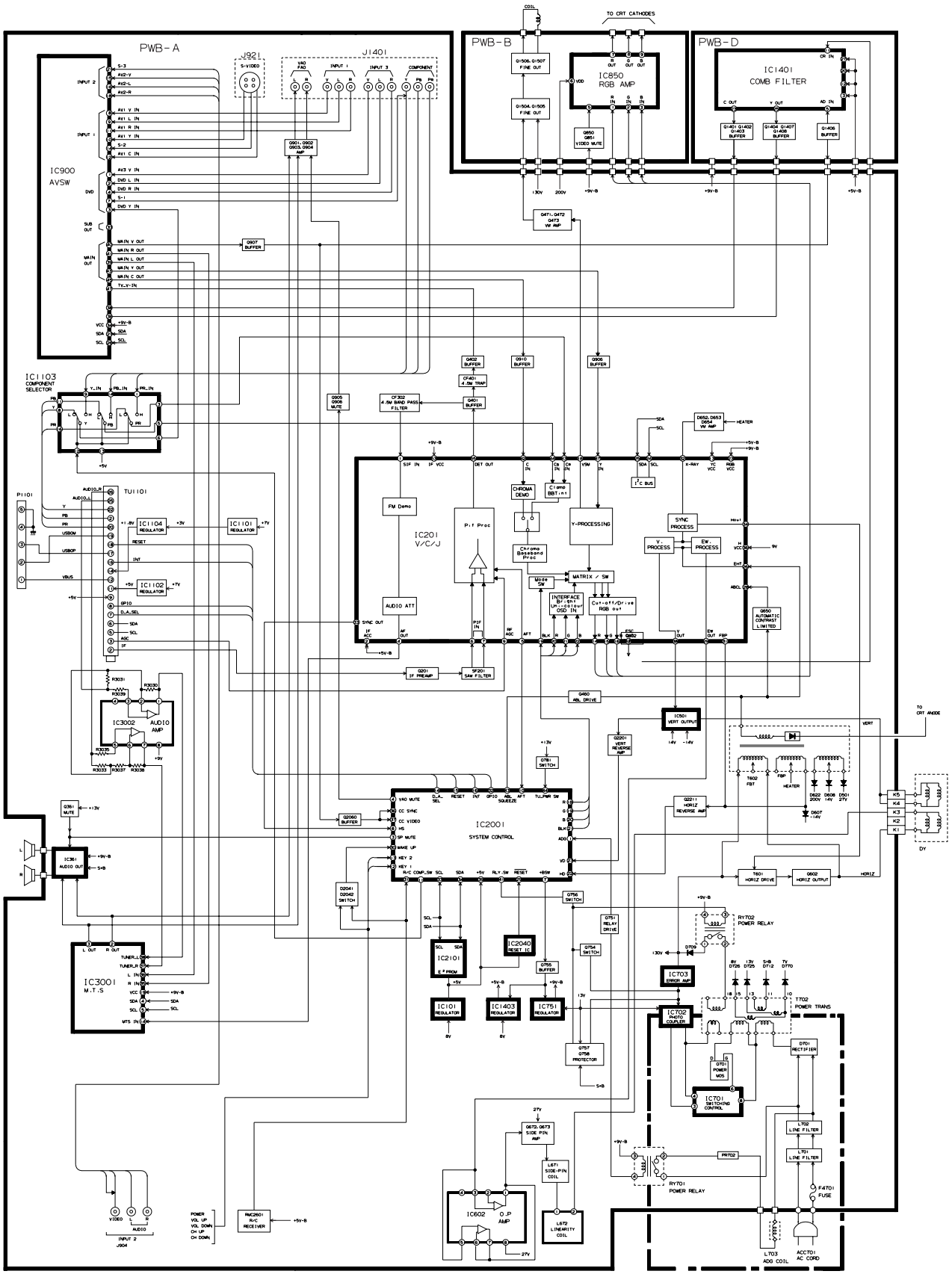
Note: SIGNAL 1 Adj. for widebando
SIGNAL 2 Adj. for spectral
Check the output of the speaker at the maximum volume as stated below.
Confirmation spec:
ADJ spec: above 25 dB
CHK spec: above 20 dB

- M E M O -

CHASSIS LAYOUT



BLOCK DIAGRAM


PWB-A
PWB-B
PWB-D
IC900
AVSW
IC1103
COMPONENT SELECTOR
IC201
V/C/J
IC2001
SYSTEM CONTROL
IC1401
COMB FILTER
IC850
RGB AMP
IC3002
AUDIO AMP
IC3001
M.T.S
IC361
AUDIO OUT
IC501
VERT OUTPUT
IC602
O.P AMP
IC703
ERROR AMP
IC702
PHOTO COUPLER
IC701
SWITCHING CONTROL
IC2101
E²PROM
IC2040
RESET IC
IC1101
REGULATOR
IC1403
REGULATOR
IC751
REGULATOR
IC1104
REGULATOR
IC1102
REGULATOR
TU1101
P1101
J1401
J921
J904
T702
POWER TRANS
T501
HORIZ DRIVE
Q502
HORIZ OUTPUT
RY702
POWER RELAY
RY701
POWER RELAY
F4701
FUSE
L702
LINE FILTER
L701
LINE FILTER
L703
ADG COIL
ACC701
AC CORD
D701
RECTIFIER
Q701
POWER MOS
L672
LINEARITY COIL
L671
SIDE-PIN COIL
Q672, Q673
SIDE PIN AMP
Q650
AUTOMATIC CONTRAST LIMITED
Q460
ABL DRIVE
Q2201
HORIZ REVERSE AMP
Q2201
VERT REVERSE AMP
Q751
RELAY DRIVE
Q754
SWITCH
Q755
BUFFER
Q756
SWITCH
Q757, Q758
PROTECTOR
Q2060
BUFFER
Q361
MUTE
Q907
BUFFER
Q902, Q903, Q904
AMP
Q471, Q472, Q473
VM AMP
Q650, Q653, Q654
VM AMP
Q1504, Q1505
FINE OUT
Q1506, Q1507
FINE OUT
Q850, Q851
VIDEO MUTE
Q1401, Q1402, Q1403
BUFFER
Q1404, Q1407, Q1408
BUFFER
Q1406
BUFFER
Q402
BUFFER
Q910
BUFFER
Q905
BUFFER
Q905
MUTE
Q401
BUFFER
Q201
IF PREAMP
CF401
4.5M TRAP
CF302
4.5M BAND PASS FILTER
SF201
SAW FILTER
D2041, D2042
SWITCH
D701
D702
D703
D704
D705
D706
D707
D501
D502
D503
D504
D505
D506
D507
D508
D509
D510
D511
D512
D513
D514
D515
D516
D517
D518
D519
D520
D521
D522
D523
D524
D525
D526
D527
D528
D529
D530
D531
D532
D533
D534
D535
D536
D537
D538
D539
D540

DESCRIPTION OF SCHEMATIC DIAGRAMS

NOTES:

1. *The unit of resistance "ohm" is omitted. (K=kW=1000W, M=MW)*
2. *All resistors are 1/16 watt, unless otherwise noted.*
3. *All capacitors are μ F, unless otherwise noted. (P=pF=μμF)*
4. *(G) indicates ±2% tolerance may be used.*
5. *⏚ indicates line isolated ground.*

VOLTAGE MEASUREMENT CONDITIONS:

1. *All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.*
2. *All voltages measured with 1000μ V B & W or Color signal.*

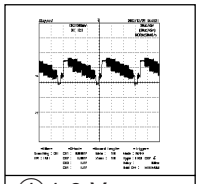
WAVEFORM MEASUREMENT CONDITIONS:

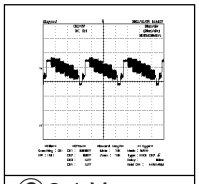
1. *Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.*
2. *⟳ indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)*

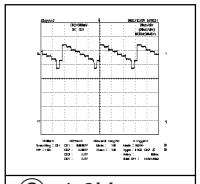
⚠ *AND SHADED ( ) COMPONENTS = SAFETY RELATED PARTS.*
▲ *MARK= X-RAY RELATED PARTS.*

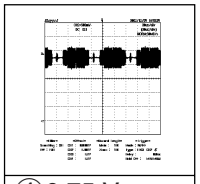
This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

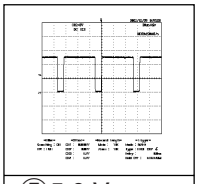
WAVEFORMS

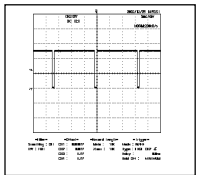

①1.0 Vp-p

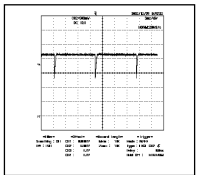

②2.1 Vp-p

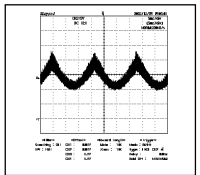

③ 1.0Vp-p

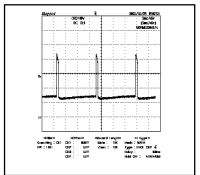

④0.75 Vp-p

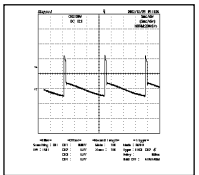

⑤5.0 Vp-p

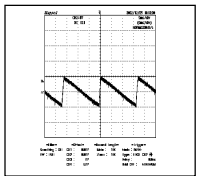

⑥5.0 Vp-p

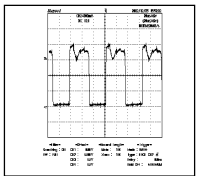

⑦0.85 Vp-p

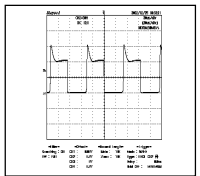

⑧12.5 Vp-p

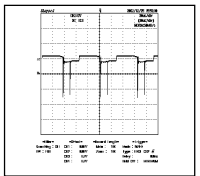

⑨32 Vp-p

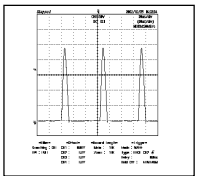

⑩56 Vp-p

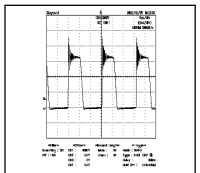

⑪2.0 Vp-p

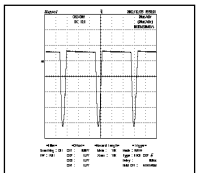

⑫0.8 Vp-p

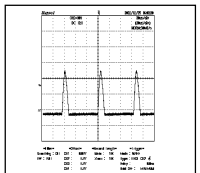

⑬160 Vp-p

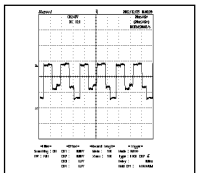

⑭14 Vp-p

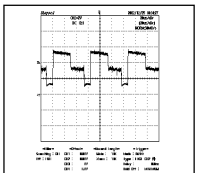

⑮1150 Vp-p

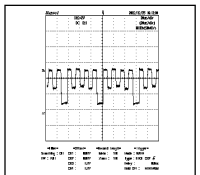

⑯450 Vp-p

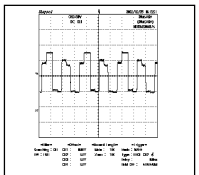

⑰250 Vp-p

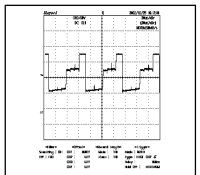

⑱29.5 Vp-p

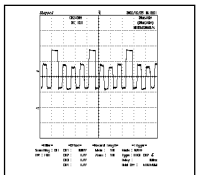

⑲3.0 Vp-p


⑳3.0 Vp-p

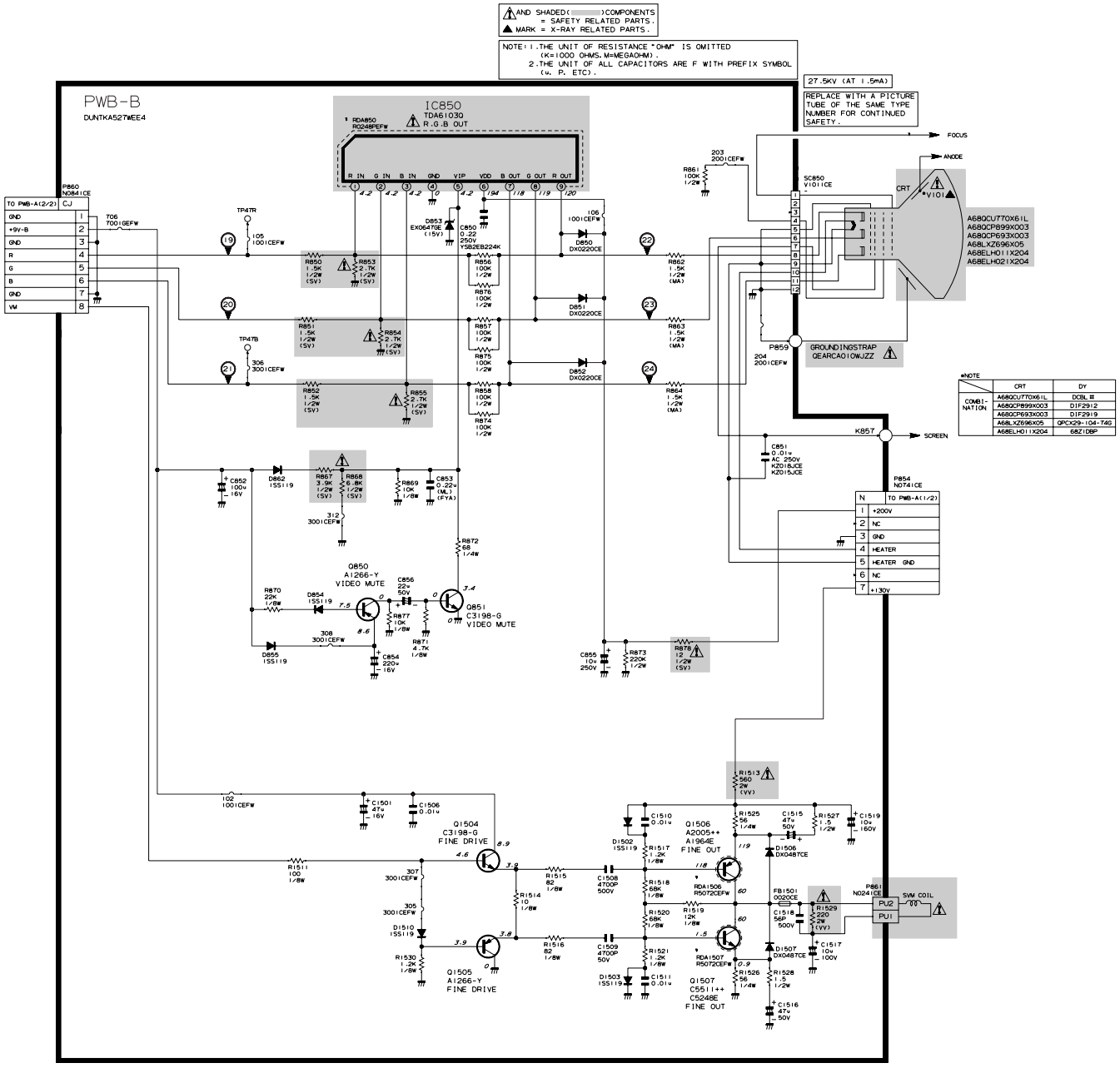

㉑3.0 Vp-p


㉒130 Vp-p

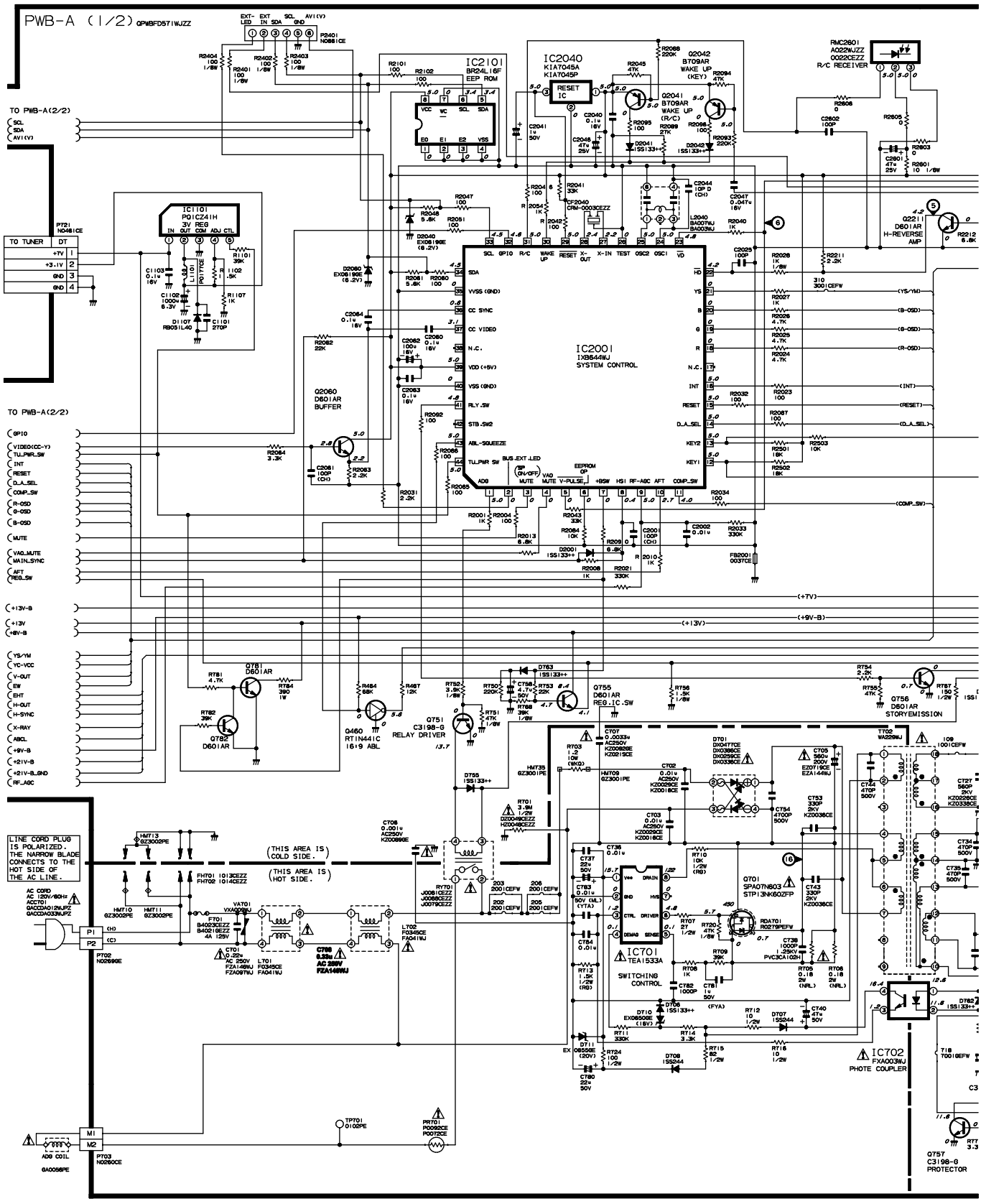

㉓125 Vp-p


㉔130 Vp-p

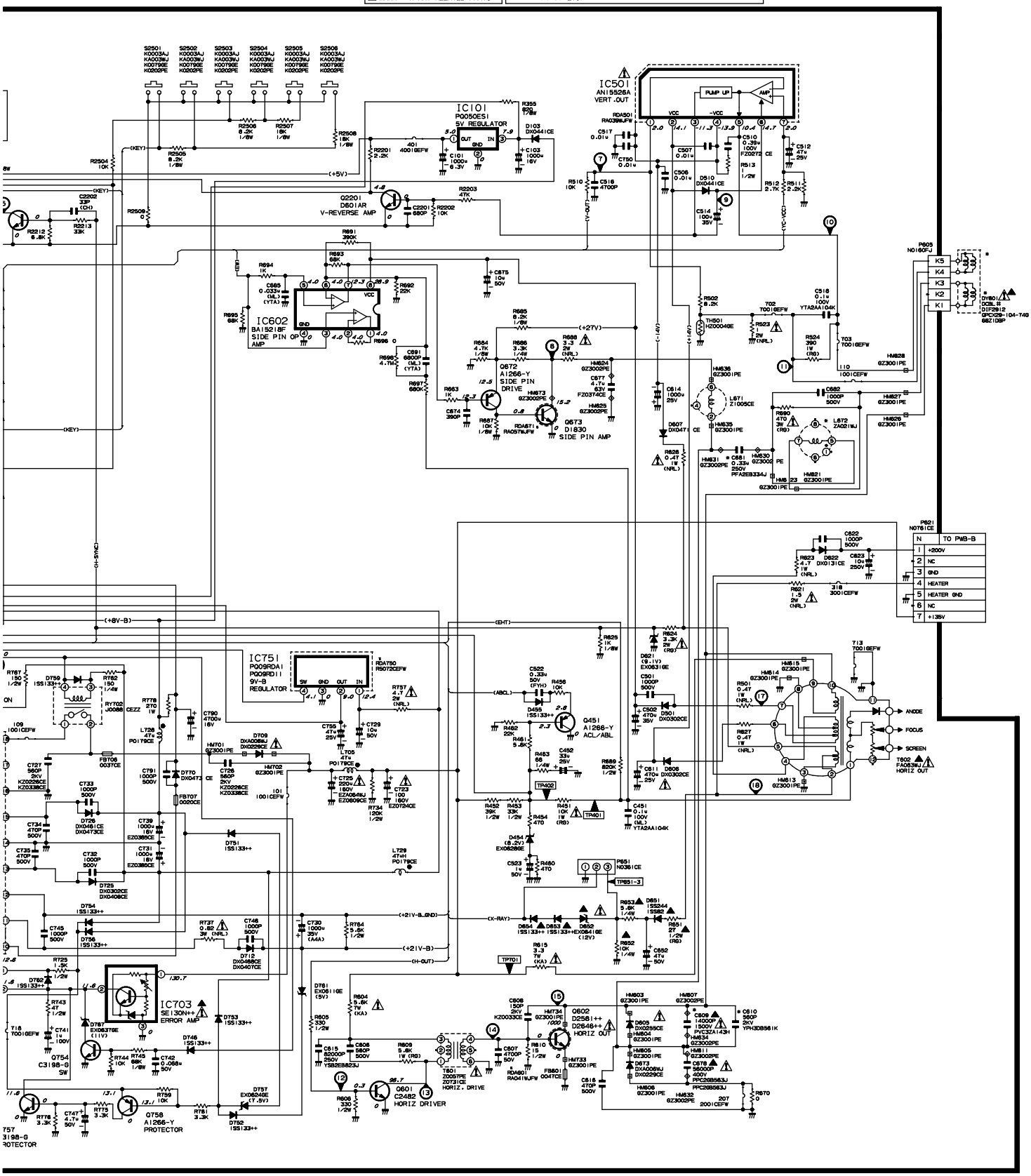
SCHEMATIC DIAGRAM: CRT Unit



SCHEMATIC DIAGRAM: MAIN-1 Unit

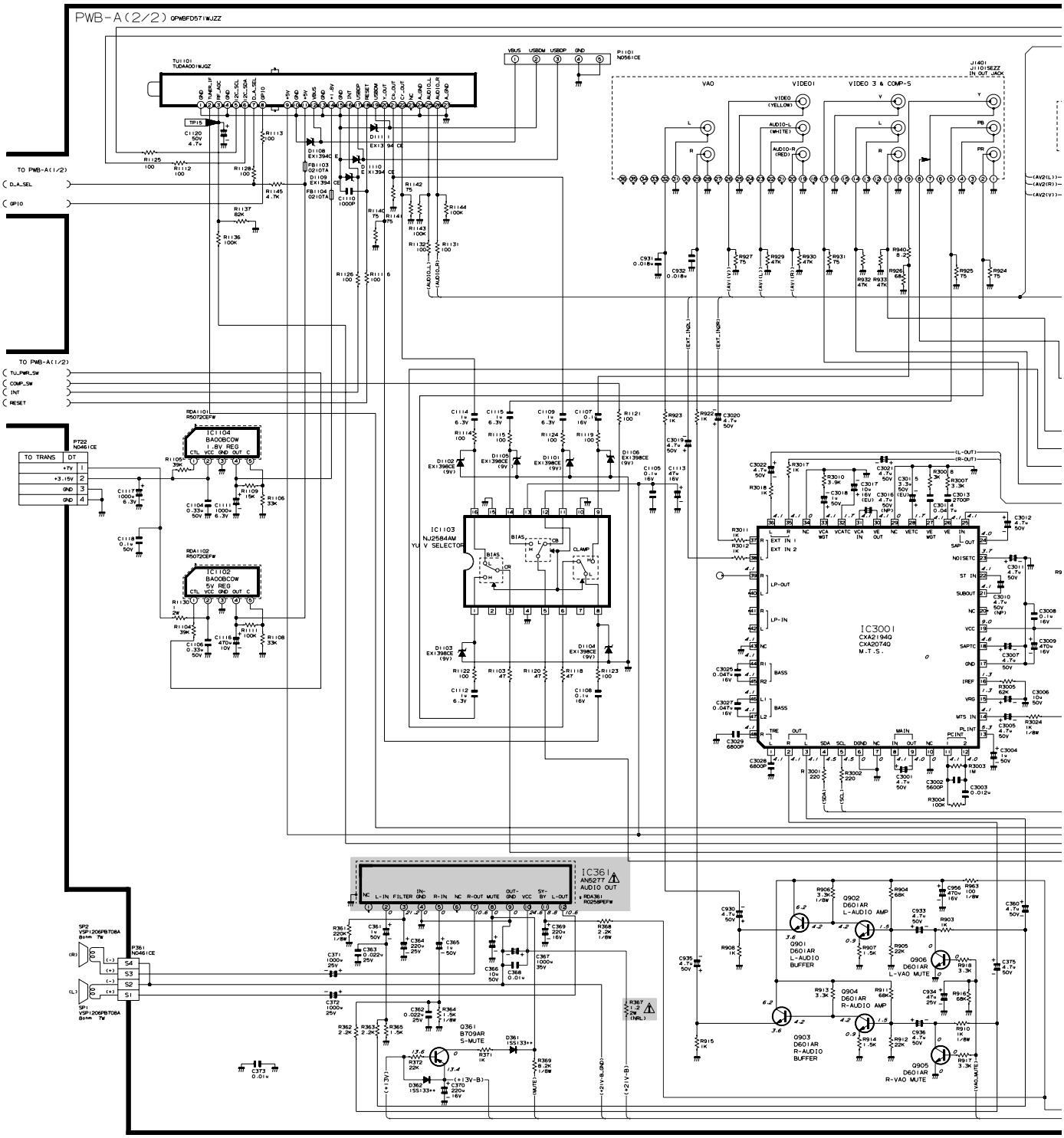


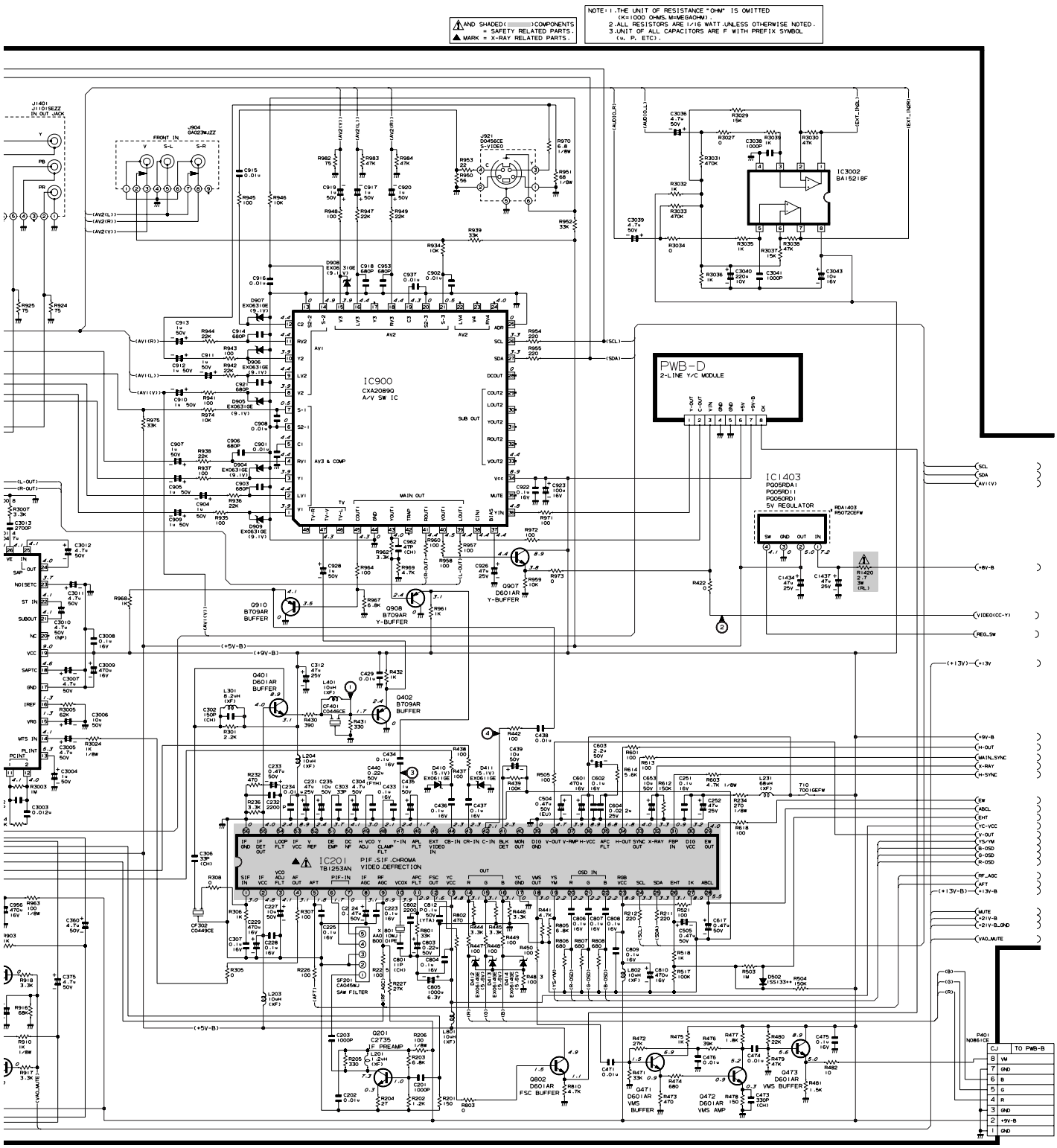
MAIN1



10	11	12	13	14	15	16	17	18	19

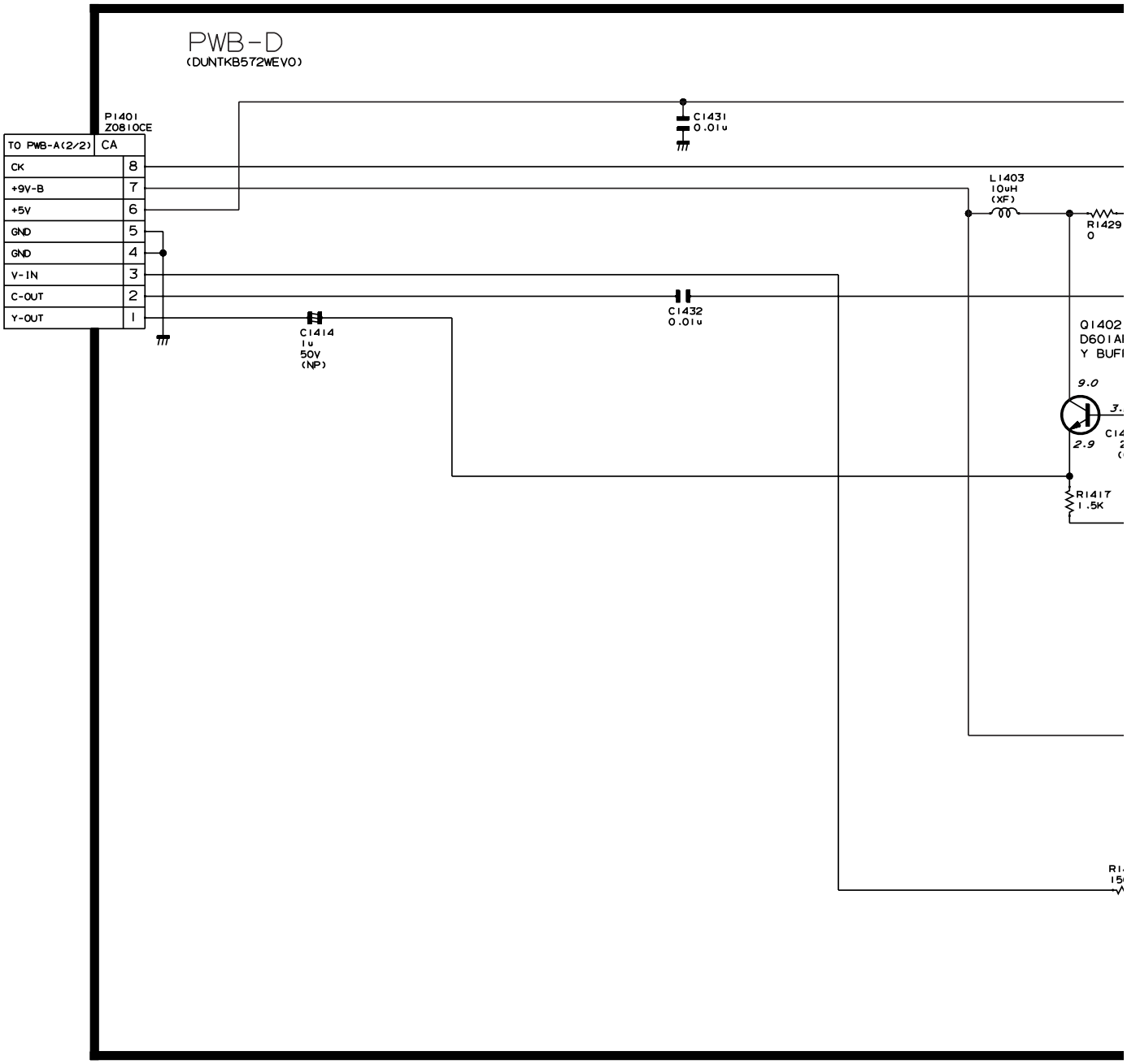
SCHEMATIC DIAGRAM: MAIN-2 Unit



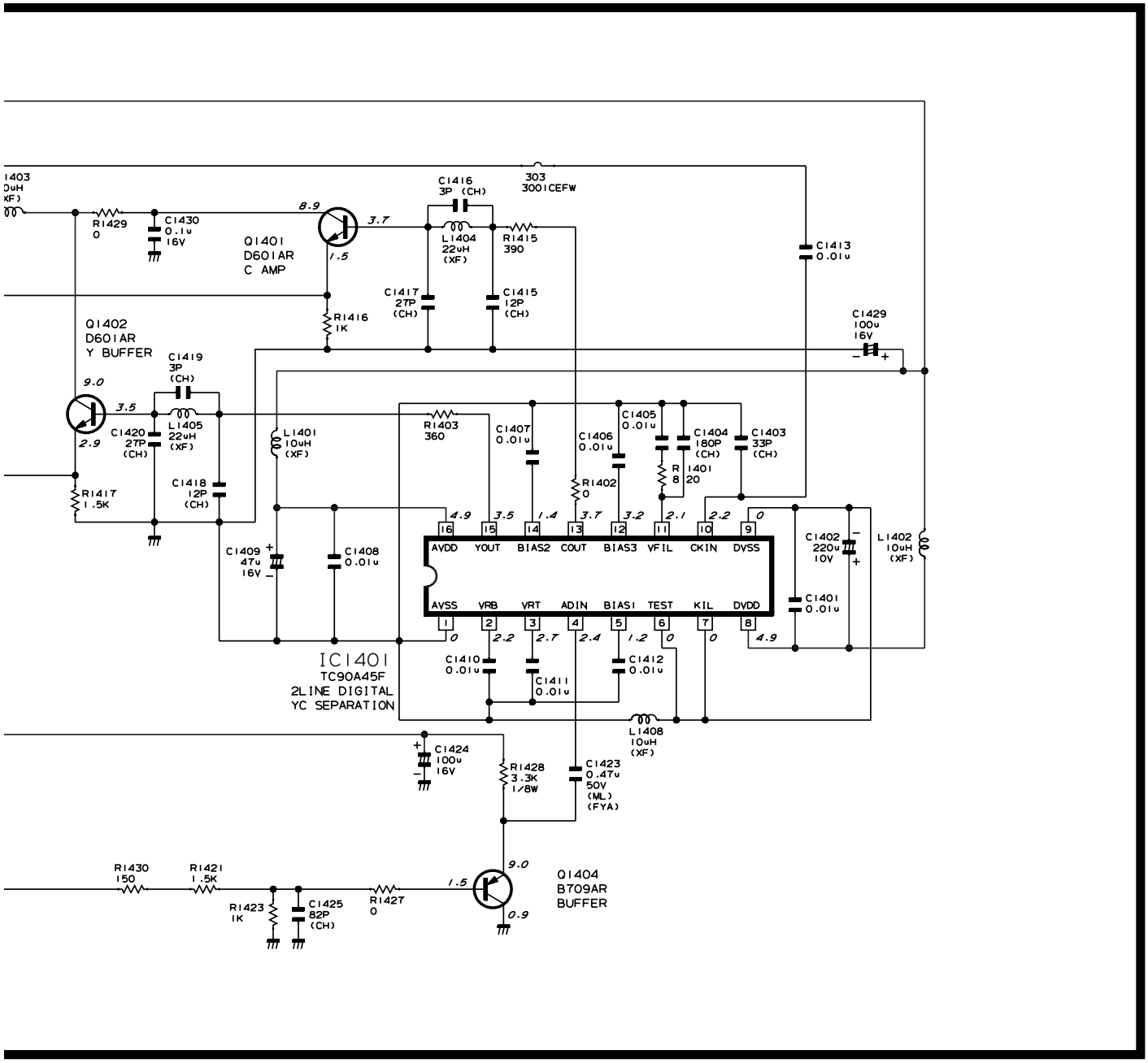


10	11	12	13	14	15	16	17	18	19

SCHEMATIC DIAGRAM: 2-LINE Y/C Unit



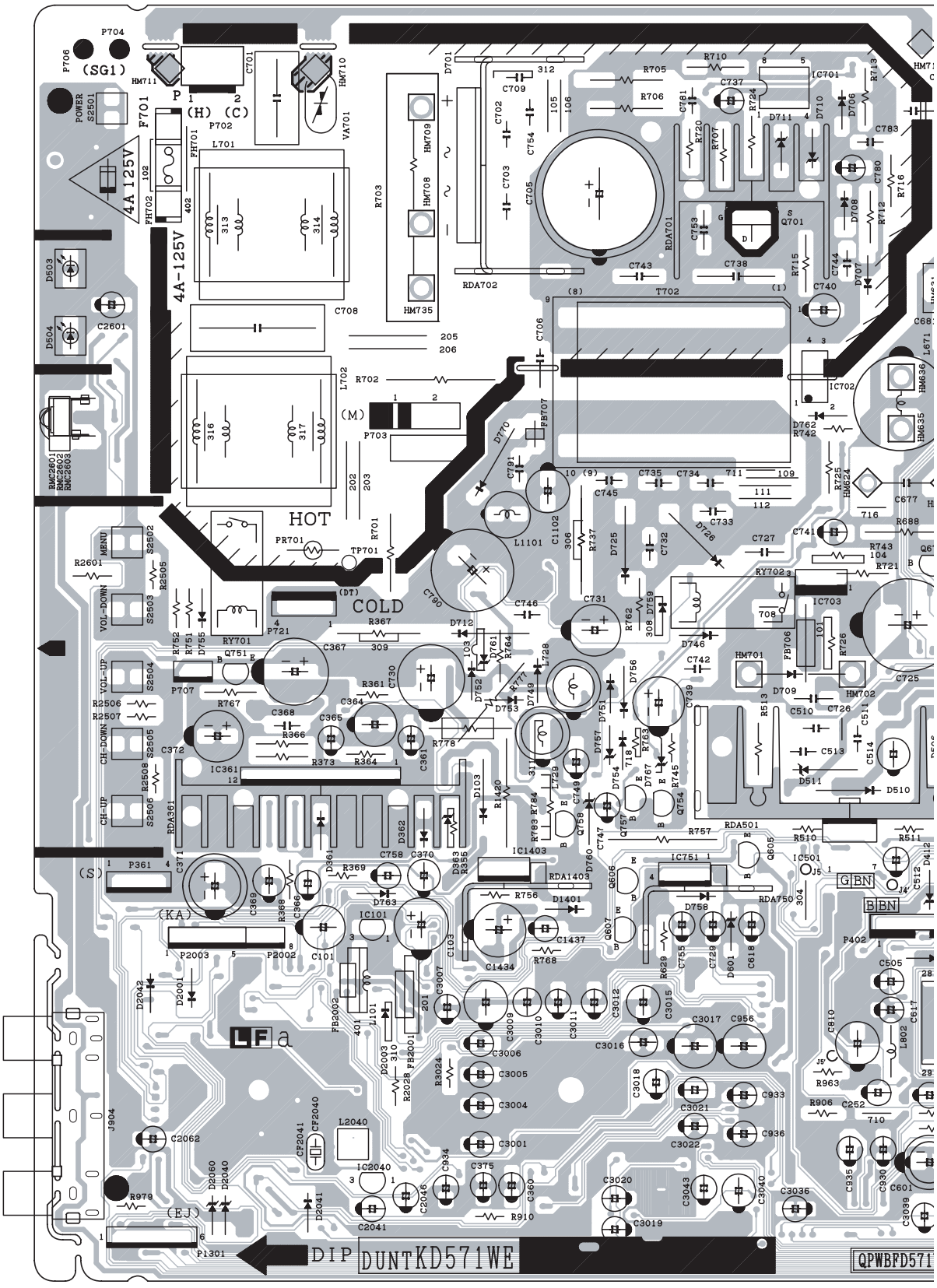
NOTE: 1.THE UNIT OF RESISTANCE "OHM" IS OMITTED
(K=1000 OHMS, M=MEGAOHM).
2.ALL RESISTORS ARE 1/16 WATT.UNLESS OTHERWISE NOTED.
3.UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL
(u, P, ETC).

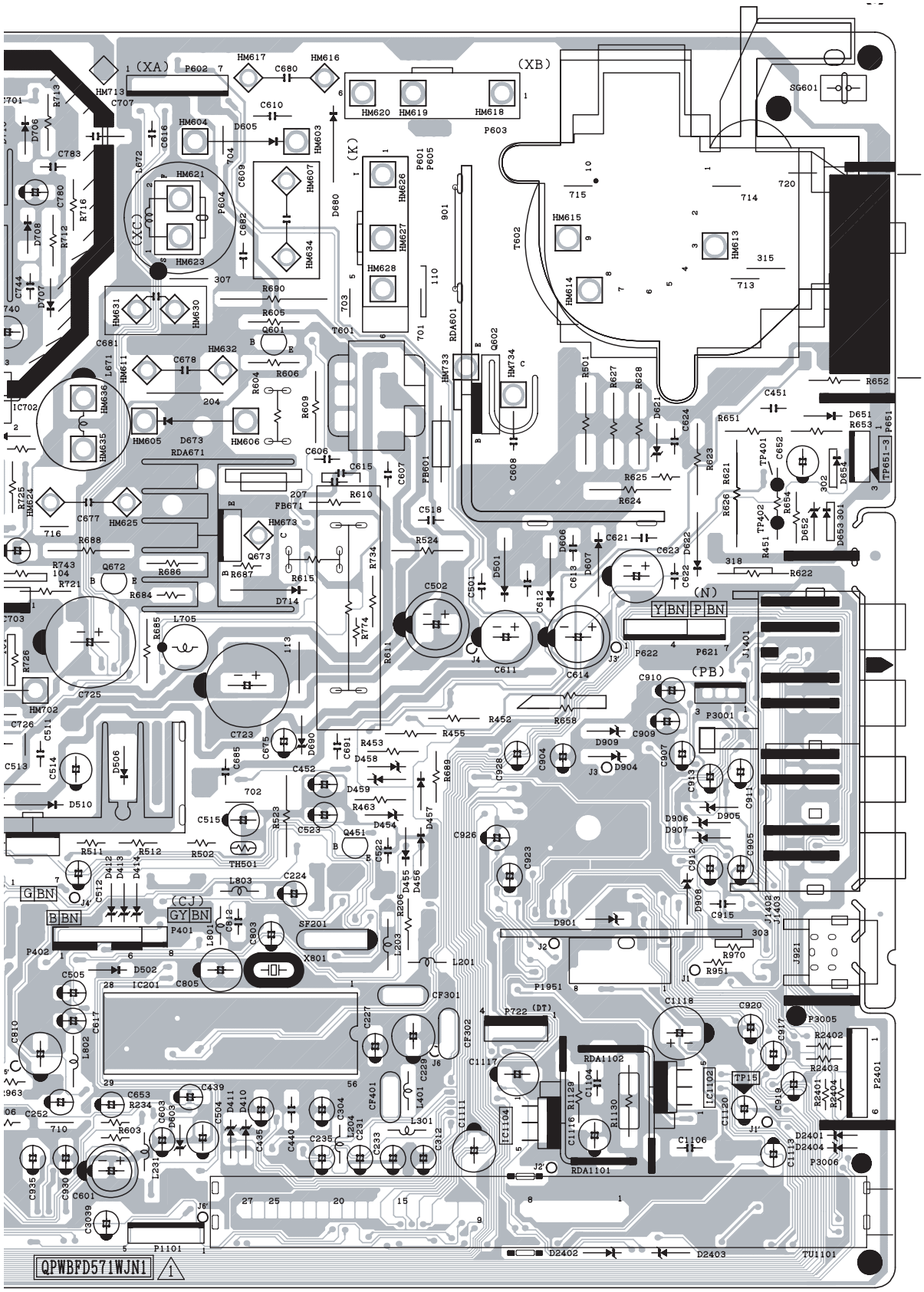


10	11	12	13	14	15	16	17	18	19

PRINTED WIRING BOARD ASSEMBLIES

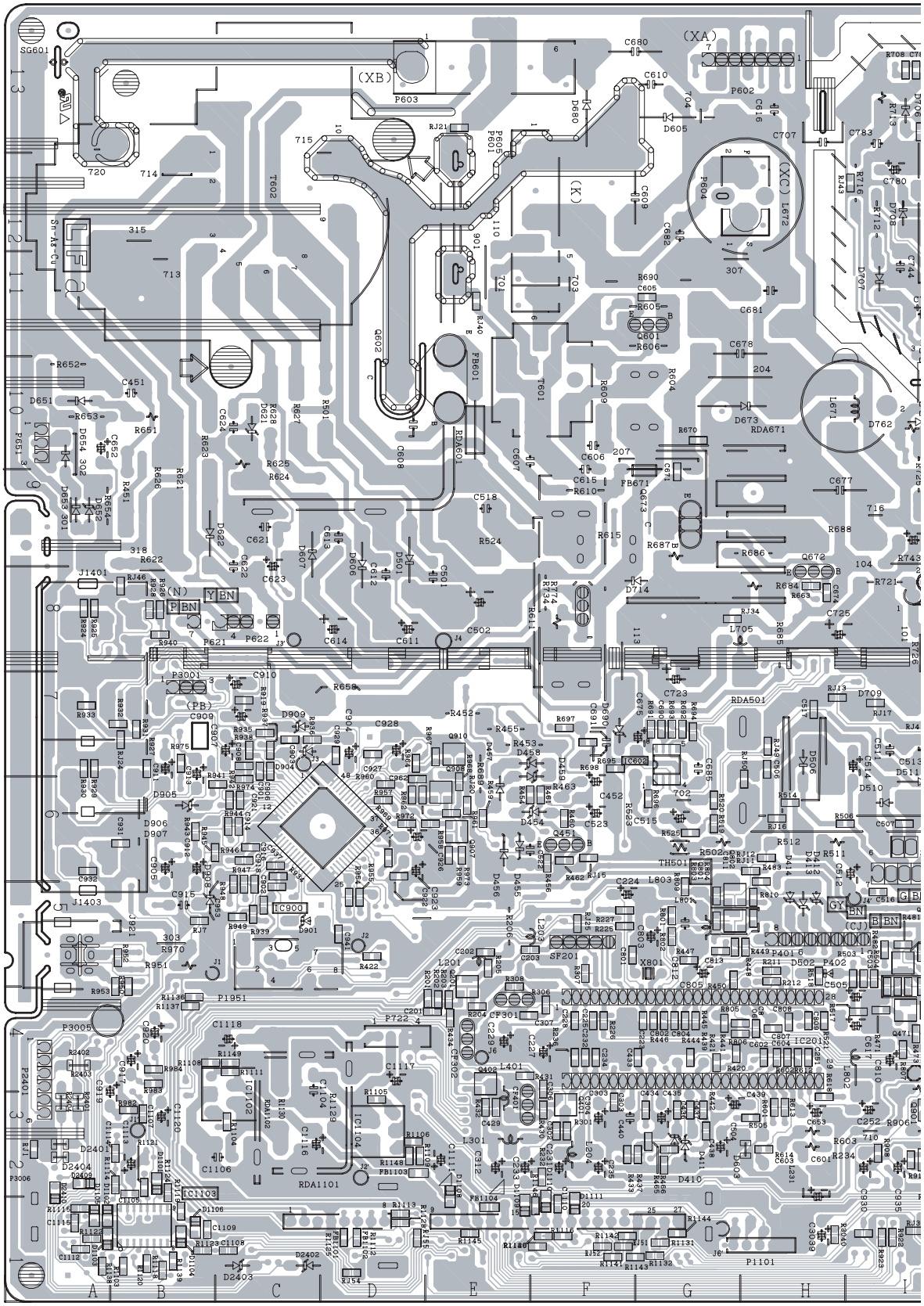
PWB-A: MAIN Unit (Wiring Components Side)

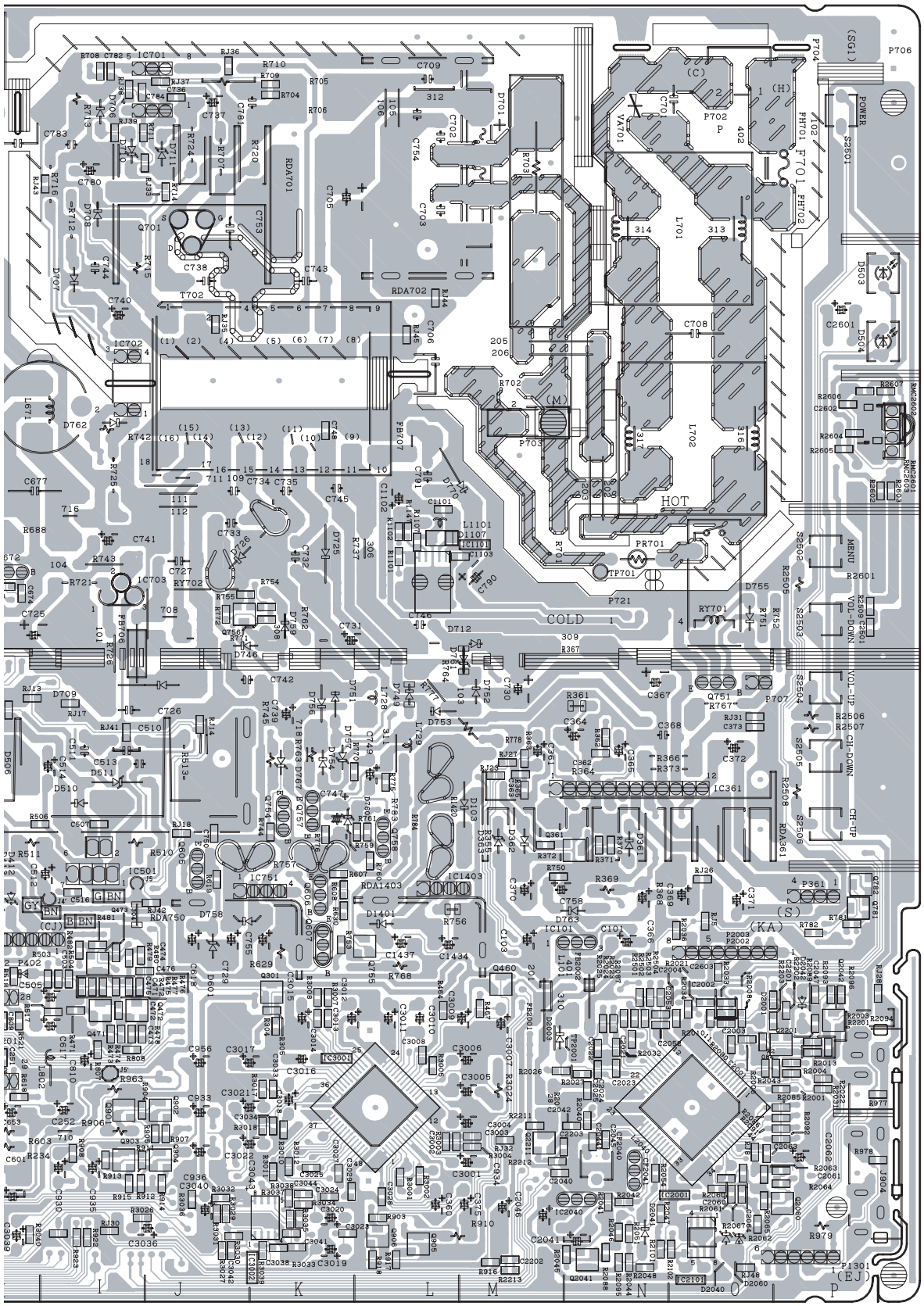




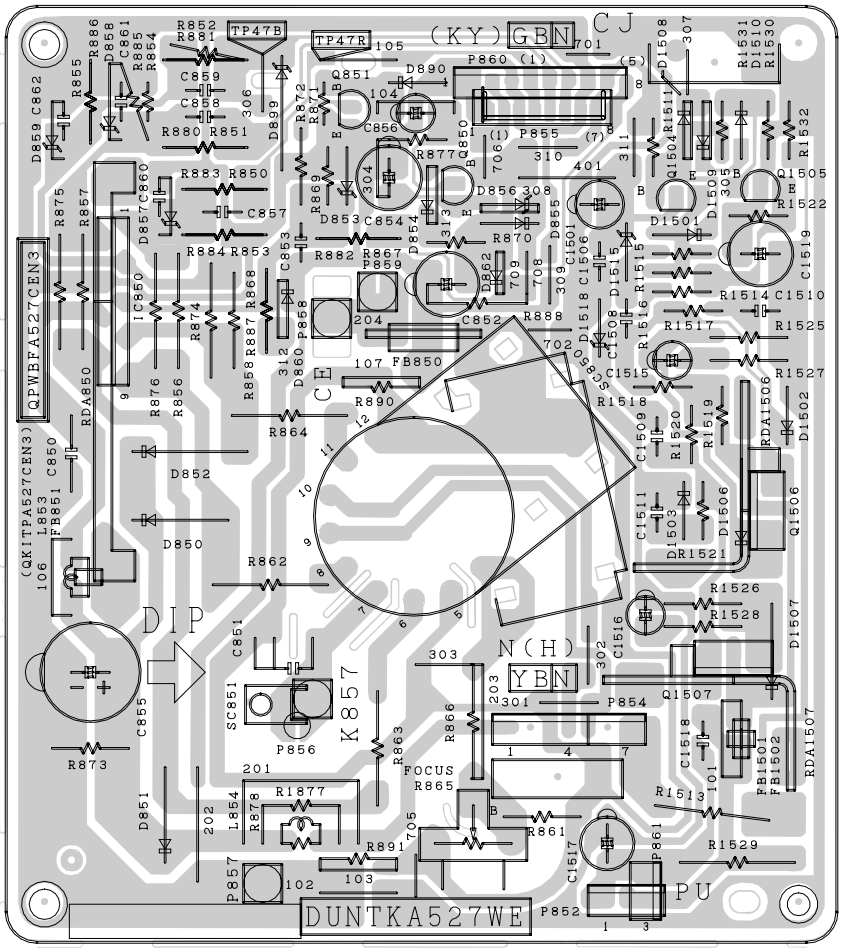
10	11	12	13	14	15	16	17	18	19

PWB-A: MAIN Unit (Components side)

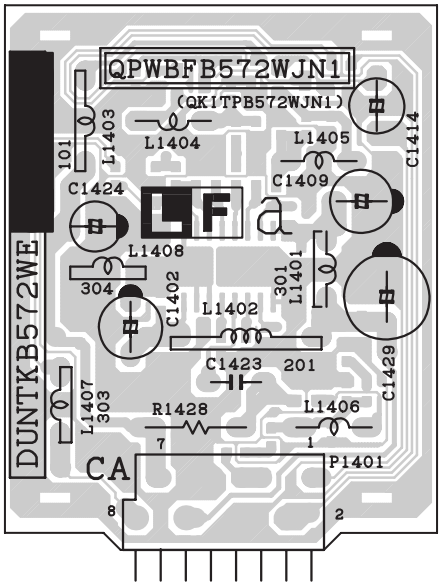




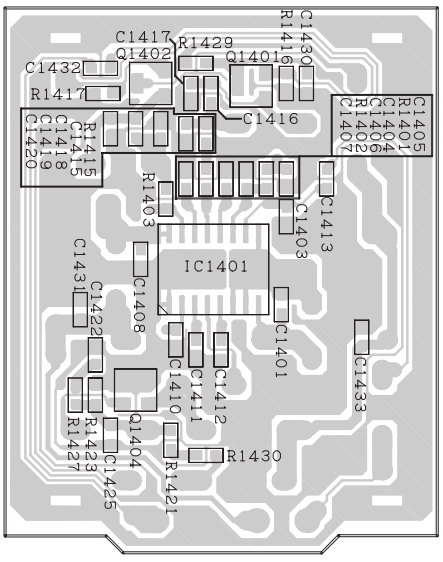
10	11	12	13	14	15	16	17	18	19



PWB-B: CRT Unit (Wiring Side)



PWB-D: 2-LINE Y/C Unit (Wiring Side)



PWB-D: 2-LINE Y/C Unit (Chip Parts Side)

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual ; electrical components having such features are identified by ⚠ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does no have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

▲ MARK: X-RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code

PICTURE TUBE

▲⚠	V101	VB68ELH021X1E	X	Picture Tube	CK
⚠		RCiLG0056PEZZ	X	Degaussing Coil	AR
⚠		QEARCA010WJZZ	X	Ground-Part	AF

PRINTED WIRING BOARD ASSEMBLIES *(NOT REPLACEMENT ITEM)*

PWB-A	DUNTKD571WEA4	– MAIN Unit	—
PWB-B	DUNTKA527WEE4	– CRT Unit	—
PWB-D	DUNTKB572WEV0	– 2-LINE Y/C Unit	—

Ref. No.	Part No.	★	Description	Code

DUNTKD571WEA4 PWB-A MAIN UNIT

TUNER

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

	TU1101	RTUDAA001WJQZ	X	Digital Tuner	BY

INTEGRATED CIRCUITS

	IC101	VHiPQ050ES1-1+	X	PQ050ES1MXP	AD
▲⚠	IC201	VHiTB1253AN-1	X	TB1253AN	AT
⚠	IC361	VHiAN5277//-1	X	AN5277	AK
⚠	IC501	VHiAN15526A-1	X	AN15526A	AG
	IC602	VHiBA15218F2EY	X	BA15218F-E2	AD
⚠	IC701	VHiTEA1533A-1	X	TEA1533AP	AH
⚠	IC702	RH-FXA003WJZZ	X	PC123Y82	AC
▲⚠	IC703	VHiSE130N++-F	X	SE130N	AF
	IC751	VHiPQ09RDA1-1	X	PQ090RDA1SZ	AE
	IC900	VHiCXA2089Q-2Y	X	CXA2089Q-6T	AN
	IC1101	VHiPQ1CZ41H-1Y	X	PQ1CZ41H2ZP	AG
	IC1102	VHiBA00BC0W-1S	X	BA00BC0WT-V5	AF
	IC1103	VHiNJ2584AM-1Y	X	INJ2584AM	AH
	IC1104	VHiBA00BC0W-1S	X	BA00BC0WT-V5	AF
	IC1403	VHiPQ05RDA1-1	X	PQ050RDA1SZ	AF
	IC2001	RH-iXB644WJQZQ	X	I.C.	AR
	IC2040	VHiKiA7045A-1+	X	KiA7045AP	AD
	IC2101	VHiBR24L16F-1Y	X	BR24L16F-WE2	AE
	IC3001	VHiCXA2194Q-1Y	X	CXA2194Q/-T6	AS
	IC3002	VHiBA15218F2EY	X	BA15218F-E2	AD

TRANSISTORS

	Q201	VS2SC2735//1EY	X	2SC2735	AB
	Q361	VS2SB709AR/-1Y	X	2SB709AR	AB
	Q401	VS2SD601AR/-1Y	X	SD601AR	AB
	Q402	VS2SB709AR/-1Y	X	2SB709AR	AB
	Q451	VS2SA1266-Y-1+	X	2SA1266-Y	AB
	Q460	VSRT1N441C/-1Y	X	RT1N441C	AA
	Q471	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q472	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q473	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q601	VS2SC2482//-1+	X	2SC2482	AC
⚠	Q602	VS2SD2581++2E	X	2SD2581	AL
	Q672	VS2SA1266-Y-1+	X	2SA1266-Y	AB
	Q673	VS2SD1830//1E	X	2SD1830	AF
⚠	Q701	VSSPA07N603-1	X	SPA07N603	AK
	Q751	VS2SC3198-G-1+	X	2SC3198-G	AB
	Q754	VS2SC3198-G-1+	X	2SC3198-G	AB
	Q755	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q756	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q757	VS2SC3198-G-1+	X	2SC3198-G	AB
	Q758	VS2SA1266-Y-1+	X	2SA1266-Y	AB
	Q781	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q782	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q802	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q901	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q902	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q903	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q904	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q905	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q906	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q907	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q908	VS2SB709AR/-1Y	X	2SB709AR	AB
	Q910	VS2SB709AR/-1Y	X	2SB709AR	AB
	Q2041	VS2SB709AR/-1Y	X	2SB709AR	AB
	Q2042	VS2SB709AR/-1Y	X	2SB709AR	AB
	Q2060	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q2201	VS2SD601AR/-1Y	X	2SD601AR	AB
	Q2211	VS2SD601AR/-1Y	X	2SD601AR	AB

Ref. No.	Part No.	★	Description	Code
DIODES				
D103	RH-DX0441CEZZY	X	DX0441CE	AA
D361	VHD1SS133++-1Y	X	1SS133++	AA
D362	VHD1SS133++-1Y	X	1SS133++	AA
D410	RH-EX0611GEZZY	X	Zener Diode, 5.1V	AB
D411	RH-EX0611GEZZY	X	Zener Diode, 5.1V	AB
D412	RH-EX0614GEZZY	X	Zener Diode, 5.6V	AB
D413	RH-EX0614GEZZY	X	Zener Diode, 5.6V	AB
D414	RH-EX0614GEZZY	X	Zener Diode, 5.6V	AB
D454	RH-EX0628GEZZY	X	Zener Diode, 8.2V	AB
D455	VHD1SS133++-1Y	X	1SS133++	AA
D501	RH-DX0302CEZZY	X	DX0302CE	AC
D502	VHD1SS133++-1Y	X	1SS133++	AA
D510	RH-DX0441CEZZY	X	DX0441CE	AA
⚠ D605	RH-DX0255CEZZ	X	DX0255CE	AF
⚠ D606	RH-DX0302CEZZY	X	DX0302CE	AC
D607	RH-DX0471CEZZY	X	DX0471CE	AC
D621	RH-EX0631GEZZY	X	Zener Diode, 9.1V	AB
⚠ D622	RH-DX0131CEZZY	X	DX0131CE	AB
▲⚠ D651	VHD1SS244//-1Y	X	1SS244	AB
▲⚠ D652	RH-EX0641GEZZY	X	Zener Diode, 12V	AB
▲⚠ D653	VHD1SS133++-1Y	X	1SS133	AA
▲⚠ D654	VHD1SS133++-1Y	X	1SS133	AA
⚠ D673	RH-DXA006WJZZ	X	DXA006WJ	AD
⚠ D701	RH-DX0477CEZZ	X	DX0477CE	AF
D706	VHD1SS133++-1Y	X	1SS133++	AA
D707	VHD1SS244//-1Y	X	1SS244	AB
D708	VHD1SS244//-1Y	X	1SS244	AB
⚠ D709	RH-DXA006WJZZ	X	DXA006WJ	AD
D710	RH-EX0650GEZZY	X	Zener Diode, 16V	AB
D711	RH-EX0655GEZZY	X	Zener Diode, 20V	AB
D712	RH-DX0468CEZZ	X	DX0468CE	AD
D725	RH-DX0302CEZZY	X	DX0302CE	AC
D726	RH-DX0461CEZZ	X	DX0461CE	AD
D746	VHD1SS133++-1Y	X	1SS133++	AA
D751	VHD1SS133++-1Y	X	1SS133++	AA
D752	VHD1SS133++-1Y	X	1SS133++	AA
D753	VHD1SS133++-1Y	X	1SS133++	AA
D754	VHD1SS133++-1Y	X	1SS133++	AA
D755	VHD1SS133++-1Y	X	1SS133++	AA
D756	VHD1SS133++-1Y	X	1SS133++	AA
D757	RH-EX0624GEZZY	X	Zener Diode, 7.5V	AB
D759	VHD1SS133++-1Y	X	1SS133++	AA
D761	RH-EX0611GEZZY	X	Zener Diode, 5V	AB
D762	VHD1SS133++-1Y	X	1SS133++	AA
D763	VHD1SS133++-1Y	X	1SS133++	AA
D767	RH-EX0637GEZZY	X	Zener Diode, 11V	AB
D770	RH-DX0473CEZZ	X	DX0473CE	AD
D904	RH-EX0631GEZZY	X	Zener Diode, 9.1V	AB
D905	RH-EX0631GEZZY	X	Zener Diode, 9.1V	AB
D906	RH-EX0631GEZZY	X	Zener Diode, 9.1V	AB
D907	RH-EX0631GEZZY	X	Zener Diode, 9.1V	AB
D908	RH-EX0631GEZZY	X	Zener Diode, 9.1V	AB
D909	RH-EX0631GEZZY	X	Zener Diode, 9.1V	AB
D1101	RH-EX1398CEZZY	X	Zener Diode, 9V	AB
D1102	RH-EX1398CEZZY	X	Zener Diode, 9V	AB
D1103	RH-EX1398CEZZY	X	Zener Diode, 9V	AB
D1104	RH-EX1398CEZZY	X	Zener Diode, 9V	AB
D1105	RH-EX1398CEZZY	X	Zener Diode, 9V	AB
D1106	RH-EX1398CEZZY	X	Zener Diode, 9V	AB
D1107	VHDRB051L40-1Y	X	RB051L40	AD
D1108	RH-EX1394CEZZY	X	Zener Diode	AB
D1109	RH-EX1394CEZZY	X	Zener Diode	AB
D1110	RH-EX1394CEZZY	X	Zener Diode	AB
D1111	RH-EX1394CEZZY	X	Zener Diode	AB
D2001	VHD1SS133++-1Y	X	1SS133++	AA
D2040	RH-EX0619GEZZY	X	Zener Diode, 6.2V	AB
D2041	VHD1SS133++-1Y	X	1SS133++	AA
D2042	VHD1SS133++-1Y	X	1SS133++	AA
D2060	RH-EX0619GEZZY	X	Zener Diode, 6.2V	AB
PACKAGED CIRCUITS				
TH501	RH-HZ0004GEZZ+	X	Thermistor	AD
⚠ VA701	RH-VXA009WJZZ	X	Varistor	AC
⚠ PR701	RMPTP0092CEZZ	X	Packaged Circuit	AF
X801	RCRSAA010WJZZ	X	Crystal, 3579.545kHz	AD

Ref. No.	Part No.	★	Description	Code
FILTERS AND COILS				
CF302	RFiLC0449CEZZ+	X	Filter	AC
CF401	RFiLC0446CEZZ+	X	Filter	AC
CF2040	RCRM-0003CEZZ+	X	Ceramic Vibrator, 16MHz	AD
L201	VP-XF1R2K0000Y	X	Peaking 1.2μH	AA
L203	VP-XF100K0000Y	X	Peaking 10μH	AA
L204	VP-XF100K0000Y	X	Peaking 10μH	AA
L231	VP-XF680K0000Y	X	Peaking 68μH	AA
L301	VP-XF8R2K0000Y	X	Peaking 8.2μH	AA
L401	VP-XF100K0000Y	X	Peaking 10μH	AA
L671	RCiLZ1005CEZZ	X	Coil	AF
L672	RCiLZA021WJZZ	X	Coil	AF
⚠ L701	RCiLF0345CEZZ	X	Coil	AE
⚠ L702	RCiLF0345CEZZ	X	Coil	AE
L705	RCiLP0179CEZZ+	X	Coil, 47μH	AB
L728	RCiLP0179CEZZ+	X	Coil, 47μH	AB
L729	RCiLP0179CEZZ+	X	Coil, 47μH	AB
L801	VP-XF100K0000Y	X	Peaking 10μH	AA
L802	VP-XF100K0000Y	X	Peaking 10μH	AA
L1101	RCiLP0177CEZZ+	X	Coil	AB
L2040	RCiLBA007WJZZ	X	Oscillation Coil	AD
SF201	RFiLCA045WJPZ	X	Filter	AF
TRANSFORMERS				
⚠ T601	RTRNZ0057PEZZ	X	Transformar	AF
▲⚠ T602	RTRNFA083WJZZ	X	H-Volt Transformer	AV
⚠ T702	RTRNWA229WJQZ	X	Transformer	AN

CAPACITORS

C101	VCEA0A0JW108M+	X	1000	6.3V	Electrolytic	AB
C103	VCEA0A1CW108M+	X	1000	16V	Electrolytic	AC
C201	VCKYCY1HB102KY	X	1000p	50V	Ceramic	AA
C202	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C203	VCKYCY1HB102KY	X	1000p	50V	Ceramic	AA
C223	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C224	VCEA0A1HW474M+	X	0.47	50V	Electrolytic	AA
C225	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C227	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C228	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C229	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C231	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C232	VCKYCY1HB222KY	X	2200p	50V	Ceramic	AA
C233	VCEA0A1HW474M+	X	0.47	50V	Electrolytic	AA
C234	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C235	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C251	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C252	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C302	VCCCCY1HH151JY	X	150p	50V	Ceramic	AA
C303	VCCCCY1HH330JY	X	33p	50V	Ceramic	AA
C304	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C306	VCCCCY1HH330JY	X	33p	50V	Ceramic	AA
C307	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C312	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C360	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C361	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C362	VCKYCY1EB223KY	X	0.022	25V	Ceramic	AA
C363	VCKYCY1EB223KY	X	0.022	25V	Ceramic	AA
C364	VCEA0A1EW227M+	X	220	25V	Electrolytic	AB
C365	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C366	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C367	VCEA0A1VW108M+	X	1000	35V	Electrolytic	AD
C368	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C369	VCEA0A1CW227M+	X	220	16V	Electrolytic	AB
C370	VCEA0A1CW227M+	X	220	16V	Electrolytic	AB
C371	VCEA0A1EW108M+	X	1000	25V	Electrolytic	AC
C372	VCEA0A1EW108M+	X	1000	25V	Electrolytic	AC
C373	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C375	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C429	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C433	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C434	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C435	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C436	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA

Ref. No.	Part No.	★	Description			Code
C437	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C438	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C439	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C440	VCFYFA1HA224J+	X	0.22	50V	Mylar	AB
C451	VCQYTA2AA104K+	X	0.1	100V	Mylar	AB
C452	VCEA0A1EW336M+	X	33	25V	Electrolytic	AA
C471	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C473	VCCCCY1HH331JY	X	330p	50V	Ceramic	AA
C474	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C475	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C476	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C501	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C502	VCEA0A1VW477M+	X	470	35V	Electrolytic	AC
C504	VCEACA1HC474M+	X	0.47	50V	Electrolytic	AC
C505	VCEA0A1HW474M+	X	0.47	50V	Electrolytic	AA
C506	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C507	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C510	RC-FZ0272CEZZ+	X	0.39	100V	Mylar	AC
C512	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C514	VCEA0A1VW107M+	X	100	35V	Electrolytic	AB
C516	VCKYCY1HB472KY	X	4700p	50V	Ceramic	AA
C517	VCKYCY1HF103ZY	X	0.01	50V	Ceramic	AA
C518	VCQYTA2AA104K+	X	0.1	100V	Mylar	AB
C522	VCFYFA1HA334J+	X	0.33	50V	Mylar	AB
C523	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C601	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C602	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C603	VCEA0A1HW225M+	X	2.2	50V	Electrolytic	AA
C604	VCKYCY1EB223KY	X	0.022	25V	Ceramic	AA
C606	VCKYPA2HB561K+	X	560p	500V	Ceramic	AB
C607	VCKYPA1HB472K+	X	4700p	50V	Ceramic	AA
C608	RC-KZ0033CEZZ	X	150p	2kV	Ceramic	AB
▲⚠ C609	VCFPVC3ZA143H	X	0.014	1800V		AD
			Metalized Polypro Film			
C610	VCKYPH3DB561K	X	560p	2000V	Ceramic	AC
C611	VCEA0A1EW477M+	X	470	25V	Electrolytic	AB
C614	VCEA0A1EW108M+	X	1000	25V	Electrolytic	AC
C615	VCFYSB2EB823J	X	0.082	250V	Mylar	AB
C616	VCKYPA2HB471K+	X	470p	500V	Ceramic	AA
C617	VCEA0A1HW474M+	X	0.47	50V	Electrolytic	AA
C622	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C623	VCEA4A2EN106M+	X	10	250V	Electrolytic	AD
C652	VCEA0A1HW476M+	X	47	50V	Electrolytic	AB
C653	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C674	VCKYCY1HB391KY	X	390p	50V	Ceramic	AA
C675	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C677	RC-FZ0374CEZZ	X	4.7	63V		AF
▲⚠ C678	VCQPPC2GB563J	X	0.056	400V	Mylar	AC
C681	VCFPFA2EB334J	X	0.33	250V		AC
			Metalized Polypro Film			
C682	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C685	VCQYTA1HM333J+	X	0.033	50V	Mylar	AA
C691	VCQYTA1HM682J+	X	6800p	50V	Mylar	AA
⚠ C701	RC-FZA146WJZZ	X	0.22	AC250V		AC
C702	RC-KZ0029CEZZ+	X	0.01	AC250V	Ceramic	AB
C703	RC-KZ0029CEZZ+	X	0.01	AC250V	Ceramic	AB
⚠ C705	RC-EZ0719CEZZ	X	560	200V	Electrolytic	AH
⚠ C706	RC-KZ0089GEZZA	X	1000p	AC250V	Ceramic	AB
⚠ C707	RC-KZ0092GEZZA	X	3300p	AC250V	Ceramic	AC
C708	RC-FZA146WJZZ	X	0.22	AC250V	Ceramic	AC
⚠ C723	RC-EZ0724CEZZ	X	100	160V	Electrolytic	AE
⚠ C725	RC-EZA064WJZZ	X	220	160V	Electrolytic	AF
C726	RC-KZ0226CEZZ+	X	560p	2kV	Ceramic	AC
C727	RC-KZ0226CEZZ+	X	560p	2kV	Ceramic	AC
C729	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C730	VCEA4A1VN108M+	X	1000	35V	Electrolytic	AE
C731	RC-EZ0385CEZZ+	X	1000	16V	Electrolytic	AD
C732	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C733	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C734	VCKYPA2HB471K+	X	470p	500V	Ceramic	AA
C735	VCKYPA2HB471K+	X	470p	500V	Ceramic	AA
C736	VCKYCY1HF103ZY	X	0.01	50V	Ceramic	AA
C737	VCEA0A1HW226M+	X	22	50V	Electrolytic	AA
C738	VCFPVC3CA102H	X	1000p	1600V		AC
C739	RC-EZ0385CEZZ+	X	1000	16V	Electrolytic	AD
C740	VCEA0A1HW476M+	X	47	50V	Electrolytic	AB

Ref. No.	Part No.	★	Description			Code
C741	VCEA4A2AN105M+	X	1	100V	Electrolytic	AB
C742	VCQYTA1HM683J+	X	0.068	50V	Mylar	AB
C743	RC-KZ0036CEZZ+	X	330p	2kV	Ceramic	AC
C744	VCKYPA2HB471K+	X	470p	500V	Ceramic	AA
C745	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C746	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C747	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C750	VCKYCY1HF103ZY	X	0.01	50V	Ceramic	AA
C753	RC-KZ0036CEZZ+	X	330p	2kV	Ceramic	AC
C754	VCKYPA2HB472K+	X	4700p	500V	Ceramic	AB
C755	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C758	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C780	VCEA0A1HW226M+	X	22	50V	Electrolytic	AA
C781	VCFYFA1HA105J+	X	1	50V	Mylar	AC
C782	VCKYCY1HB102KY	X	1000p	50V	Ceramic	AA
C783	VCQYTA1HM103J+	X	0.01	50V	Mylar	AA
C784	VCKYCY1HF103ZY	X	0.01	50V	Ceramic	AA
C790	VCEA4W1CN478M	X	4700	16V	Electrolytic	AF
C791	VCKYPA2HB102K+	X	1000p	500V	Ceramic	AA
C801	VCCCCY1HH110JY	X	11p	50V	Ceramic	AA
C802	VCKYCY1HB222KY	X	2200p	50V	Ceramic	AA
C803	VCEA0A1HW224M+	X	0.22	50V	Electrolytic	AA
C804	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C805	VCEA0A0JW108M+	X	1000	6.3V	Electrolytic	AB
C806	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C807	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C808	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C809	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C810	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C812	VCQYTA1HM104J+	X	0.1	50V	Mylar	AB
C901	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C902	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C903	VCKYCY1HB681KY	X	680p	50V	Ceramic	AA
C904	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C905	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C906	VCKYCY1HB681KY	X	680p	50V	Ceramic	AA
C907	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C908	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C909	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C910	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C911	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C912	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C913	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C914	VCKYCY1HB681KY	X	680p	50V	Ceramic	AA
C915	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C916	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C917	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C918	VCKYCY1HB681KY	X	680p	50V	Ceramic	AA
C919	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C920	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C921	VCKYCY1HB681KY	X	680p	50V	Ceramic	AA
C922	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C923	VCEA0A1CW107M+	X	100	16V	Electrolytic	AA
C926	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C928	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C930	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C931	VCKYCY1HB183KY	X	0.018	50V	Ceramic	AA
C932	VCKYCY1HB183KY	X	0.018	50V	Ceramic	AA
C933	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C934	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C935	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C936	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C937	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C953	VCKYCY1HB681KY	X	680p	50V	Ceramic	AA
C956	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C962	VCCCCY1HH470JY	X	47p	50V	Ceramic	AA
C1101	VCCCCY1HH271JY	X	270p	50V	Ceramic	AA
C1102	VCEA0A0JW108M+	X	1000	6.3V	Electrolytic	AB
C1103	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C1104	VCFYFA1HA334J+	X	0.33	50V	Mylar	AB
C1105	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C1106	VCFYFA1HA334J+	X	0.33	50V	Mylar	AB
C1107	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C1108	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C1109	VCKYCY0JF105ZY	X	1	6.3V	Ceramic	AA
C1110	VCKYCY1HB102KY	X	1000p	50V	Ceramic	AA

Ref. No.	Part No.	★		Description		Code
C1111	VCEA0A0JW108M+	X	1000	6.3V	Electrolytic	AB
C1112	VCKYCY0JF105ZY	X	1	6.3V	Ceramic	AA
C1113	VCEA0A1CW476M+	X	47	16V	Electrolytic	AA
C1114	VCKYCY0JF105ZY	X	1	6.3V	Ceramic	AA
C1115	VCKYCY0JF105ZY	X	1	6.3V	Ceramic	AA
C1116	VCEA0A1AW477M+	X	470	10V	Electrolytic	AB
C1117	VCEA0A0JW108M+	X	1000	6.3V	Electrolytic	AB
C1118	VCQYTA1HM104J+	X	0.1	50V	Mylar	AB
C1120	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C1434	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C1437	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C2001	VCCCCY1HH101JY	X	100p	50V	Ceramic	AA
C2002	VCKYCY1HF103ZY	X	0.01	50V	Ceramic	AA
C2025	VCCCCY1HH101JY	X	100p	50V	Ceramic	AA
C2040	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C2041	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C2044	VCCCCY1HH100DY	X	10p	50V	Ceramic	AA
C2046	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C2047	VCKYCY1CB473KY	X	0.047	16V	Ceramic	AA
C2060	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C2061	VCCCCY1HH101JY	X	100p	50V	Ceramic	AA
C2062	VCEA0A1CW107M+	X	100	16V	Electrolytic	AA
C2063	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C2064	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C2201	VCKYCY1HB681KY	X	680p	50V	Ceramic	AA
C2202	VCCCCY1HH330JY	X	33p	50V	Ceramic	AA
C2601	VCEA0A1EW476M+	X	47	25V	Electrolytic	AA
C2602	VCCCCY1HH101JY	X	100p	50V	Ceramic	AA
C3001	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3002	VCKYCY1HB562KY	X	5600p	50V	Ceramic	AA
C3003	VCKYCY1EB123KY	X	0.012	25V	Ceramic	AA
C3004	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C3005	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3006	VCEA0A1HW106M+	X	10	50V	Electrolytic	AA
C3007	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3008	VCKYCY1CF104ZY	X	0.1	16V	Ceramic	AA
C3009	VCEA0A1CW477M+	X	470	16V	Electrolytic	AB
C3010	VCE9GA1HW475M+	X	4.7	50V	Electrolytic, (N.P)	AB
C3011	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3012	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3013	VCKYCY1HB272KY	X	2700p	50V	Ceramic	AA
C3014	VCKYCY1CB473KY	X	0.047	16V	Ceramic	AA
C3015	VCEACA1HC335K+	X	3.3	50V	Electrolytic	AC
C3016	VCE9GA1HW475M+	X	4.7	50V	Electrolytic, (N.P)	AB
C3017	VCEACA1CC106K+	X	10	16V	Electrolytic	AC
C3018	VCEA0A1HW105M+	X	1	50V	Electrolytic	AA
C3019	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3020	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3021	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3022	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3025	VCKYCY1CB473KY	X	0.047	16V	Ceramic	AA
C3027	VCKYCY1CB473KY	X	0.047	16V	Ceramic	AA
C3028	VCKYCY1HB682KY	X	6800p	50V	Ceramic	AA
C3029	VCKYCY1HB682KY	X	6800p	50V	Ceramic	AA
C3036	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3038	VCKYCY1HB102KY	X	1000p	50V	Ceramic	AA
C3039	VCEA0A1HW475M+	X	4.7	50V	Electrolytic	AA
C3040	VCEA0A1AW227M+	X	220	10V	Electrolytic	AB
C3041	VCKYCY1HB102KY	X	1000p	50V	Ceramic	AA
C3043	VCEA0A1CW106M+	X	10	16V	Electrolytic	AA

RESISTORS

RJ7	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ8	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ11	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ12	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ13	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ14	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ15	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ16	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ20	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ21	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ23	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ24	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ25	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ30	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ33	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ36	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ38	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ39	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ40	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ42	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ45	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ48	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ50	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
RJ51	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R201	VRS-CY1JF151JY	X	150	1/16W	Metal Oxide	AA
R202	VRS-CY1JF122JY	X	1.2k	1/16W	Metal Oxide	AA
R203	VRS-CY1JF682JY	X	6.8k	1/16W	Metal Oxide	AA
R204	VRS-CY1JF270JY	X	27	1/16W	Metal Oxide	AA
R205	VRS-CY1JF331JY	X	330	1/16W	Metal Oxide	AA
R206	VRD-RA2BE101JY	X	100	1/8W	Carbon	AA
R211	VRS-CY1JF221JY	X	220	1/16W	Metal Oxide	AA
R212	VRS-CY1JF221JY	X	220	1/16W	Metal Oxide	AA
R225	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R226	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R227	VRS-CY1JF273JY	X	27k	1/16W	Metal Oxide	AA
R232	VRS-CY1JF471JY	X	470	1/16W	Metal Oxide	AA
R234	VRD-RA2BE271JY	X	270	1/8W	Carbon	AA
R236	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R301	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R305	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R306	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R307	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R308	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R355	VRD-RA2BE821JY	X	820	1/8W	Carbon	AA
R361	VRD-RA2BE224JY	X	220k	1/8W	Carbon	AA
R362	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R363	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R364	VRD-RA2BE152JY	X	1.5k	1/8W	Carbon	AA
R365	VRS-CY1JF152JY	X	1.5k	1/16W	Metal Oxide	AA
⚠ R367	VRN-RL3DB1R2J+	X	1.2	2W	Metal Film	AB
R368	VRD-RA2BE222JY	X	2.2k	1/8W	Carbon	AA
R369	VRD-RA2BE822JY	X	8.2k	1/8W	Carbon	AA
R371	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R372	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R422	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R430	VRS-CY1JF391JY	X	390	1/16W	Metal Oxide	AA
R431	VRS-CY1JF331JY	X	330	1/16W	Metal Oxide	AA
R432	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R437	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R438	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R439	VRS-CY1JF104JY	X	100k	1/16W	Metal Oxide	AA
R441	VRS-CY1JF472JY	X	4.7k	1/16W	Metal Oxide	AA
R442	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R444	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R445	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R446	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R447	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R448	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R449	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R450	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
⚠ R451	VRS-RG3AB103J+	X	10k	1W	Metal Oxide	AB
R452	VRD-RM2HD393JY	X	39k	1/2W	Carbon	AA
R453	VRD-RM2HD333JY	X	33k	1/2W	Carbon	AA
R454	VRS-CY1JF471JY	X	470	1/16W	Metal Oxide	AA
R456	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R460	VRS-CY1JF471JY	X	470	1/16W	Metal Oxide	AA
R461	VRS-CY1JF562JY	X	5.6k	1/16W	Metal Oxide	AA
R462	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R463	VRD-RA2EE680JY	X	68	1/4W	Carbon	AA
R464	VRS-CY1JF683JY	X	68k	1/16W	Metal Oxide	AA
R467	VRS-CY1JF123JY	X	12k	1/16W	Metal Oxide	AA
R471	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R472	VRS-CY1JF273JY	X	27k	1/16W	Metal Oxide	AA
R473	VRS-CY1JF471JY	X	470	1/16W	Metal Oxide	AA
R474	VRS-CY1JF681JY	X	680	1/16W	Metal Oxide	AA
R475	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R476	VRS-CY1JF393JY	X	39k	1/16W	Metal Oxide	AA
R477	VRS-CY1JF182JY	X	1.8k	1/16W	Metal Oxide	AA
R478	VRS-CY1JF151JY	X	150	1/16W	Metal Oxide	AA
R479	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★			Description	Code
R480	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R481	VRS-CY1JF152JY	X	1.5k	1/16W	Metal Oxide	AA
R482	VRS-CY1JF100JY	X	10	1/16W	Metal Oxide	AA
R483	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
⚠ R501	VRN-RL3ABR47J+	X	0.47	1W	Metal Film	AB
R502	VRN-RA2BK822FY	X	8.2k	1/8W	Metal Film	AB
R503	VRS-CY1JF105JY	X	1M	1/16W	Metal Oxide	AA
R504	VRS-CY1JF154JY	X	150k	1/16W	Metal Oxide	AA
R505	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R510	VRN-RA2BK103FY	X	10k	1/8W	Metal Film	AB
R511	VRN-RA2BK222FY	X	2.2k	1/8W	Metal Film	AB
R512	VRN-RA2BK272FY	X	2.7k	1/8W	Metal Film	AB
R513	VRD-RM2HD1R0JY	X	1	1/2W	Carbon	AA
R517	VRS-CY1JF104JY	X	100k	1/16W	Metal Oxide	AA
R518	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R521	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
⚠ R523	VRN-RL3DB1R0J+	X	1	2W	Metal Film	AB
⚠ R524	VRS-RG3AB391J+	X	390	1W	Metal Oxide	AB
R601	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R603	VRD-RA2BE472JY	X	4.7k	1/8W	Carbon	AA
⚠ R604	VRS-KA3NG562J	X	5.6k	7W	Metal Oxide	AD
R605	VRD-RM2HD331JY	X	330	1/2W	Carbon	AA
R606	VRD-RM2HD331JY	X	330	1/2W	Carbon	AA
⚠ R609	VRS-RG3AB562J+	X	5.6k	1W	Metal Oxide	AB
R610	VRD-RM2HD150JY	X	15	1/2W	Carbon	AA
R612	VRS-CY1JF154JY	X	150k	1/16W	Metal Oxide	AA
R613	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R614	VRS-CY1JF562JY	X	5.6k	1/16W	Metal Oxide	AA
⚠ R615	VRS-KA3NG3R3K	X	3.3	7W	Metal Oxide	AD
R618	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
⚠ R621	VRN-RL3DB1R5J+	X	1.5	2W	Metal Film	AB
⚠ R623	VRN-RL3AB4R7J+	X	4.7	1W	Metal Film	AB
⚠ R624	VRS-RG3DB332J+	X	3.3k	2W	Metal Oxide	AB
R625	VRD-RA2BE102JY	X	1k	1/8W	Carbon	AA
⚠ R627	VRN-RL3ABR47J+	X	0.47	1W	Metal Film	AB
⚠ R628	VRN-RL3ABR47J+	X	0.47	1W	Metal Film	AB
▲⚠ R651	VRS-RG2HC270J+	X	27	1/2W	Metal Oxide	AB
▲⚠ R652	VRD-RA2EE103GY	X	10k	1/4W	Carbon	AA
▲⚠ R653	VRD-RA2EE562GY	X	5.6k	1/4W	Carbon	AA
R663	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R670	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R684	VRD-RA2BE472JY	X	4.7k	1/8W	Carbon	AA
R685	VRD-RA2BE822JY	X	8.2k	1/8W	Carbon	AA
R686	VRD-RA2EE332JY	X	3.3k	1/4W	Carbon	AA
R687	VRD-RA2BE103JY	X	10k	1/8W	Carbon	AA
⚠ R688	VRN-RL3DB3R3J+	X	3.3	2W	Metal Film	AB
R689	VRD-RM2HD824JY	X	820k	1/2W	Carbon	AA
⚠ R690	VRS-RG3LB471J+	X	470	3W	Metal Oxide	AB
R691	VRS-CY1JF394JY	X	390k	1/16W	Metal Oxide	AA
R692	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R693	VRS-CY1JF683JY	X	68k	1/16W	Metal Oxide	AA
R694	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R695	VRS-CY1JF683JY	X	68k	1/16W	Metal Oxide	AA
R696	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R697	VRS-CY1JF684JY	X	680k	1/16W	Metal Oxide	AA
R698	VRS-CY1JF475JY	X	4.7M	1/16W	Metal Oxide	AA
⚠ R701	RR-DZ0049CEZZY	X	3.9M	1/2W	Solid	AB
⚠ R703	VRW-KQ4AC1R2K	X	1.2	10W	Cement	AD
⚠ R705	VRN-RL3DBR18J+	X	0.18	2W	Metal Film	AB
⚠ R706	VRN-RL3DBR18J+	X	0.18	2W	Metal Film	AB
R707	VRD-RM2HD270JY	X	27	1/2W	Carbon	AA
R708	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R709	VRS-CY1JF393JY	X	39k	1/16W	Metal Oxide	AA
⚠ R710	VRS-RG2HC103J+	X	10k	1/2W	Metal Oxide	AB
R711	VRS-CY1JF334JY	X	330k	1/16W	Metal Oxide	AA
R712	VRD-RM2HD100JY	X	10	1/2W	Carbon	AA
⚠ R713	VRS-RG2HC152J+	X	1.5k	1/2W	Metal Oxide	AB
R714	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R715	VRS-RG2HC820J+	X	82	1/2W	Metal Oxide	
R716	VRD-RM2HD100JY	X	10	1/2W	Carbon	AA
R720	VRD-RA2BE473JY	X	47k	1/8W	Carbon	AA
R724	VRD-RM2HD101JY	X	100	1/2W	Carbon	AA
R725	VRD-RM2HD152JY	X	1.5k	1/2W	Carbon	AA
R734	VRD-RM2HD124JY	X	120k	1/2W	Carbon	AA
⚠ R737	VRN-RL3LBR82J+	X	0.82	3W	Metal Film	AC
R743	VRD-RM2HD470JY	X	47	1/2W	Carbon	AA
R744	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R745	VRD-RA2BE683JY	X	68k	1/8W	Carbon	AA
R750	VRS-CY1JF224JY	X	220k	1/16W	Metal Oxide	AA
R751	VRD-RA2BE473JY	X	47k	1/8W	Carbon	AA
R752	VRD-RA2BE392JY	X	3.9k	1/8W	Carbon	AA
R753	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R754	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R755	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R756	VRD-RA2BE152JY	X	1.5k	1/8W	Carbon	AA
⚠ R757	VRN-RL3DB4R7J+	X	4.7	2W	Metal Film	AB
R759	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R761	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R762	VRD-RA2EE151JY	X	150	1/4W	Carbon	AA
R764	VRD-RM2HD562JY	X	5.6k	1/2W	Carbon	AA
R767	VRD-RM2HD151JY	X	150	1/2W	Carbon	AA
R768	VRD-RA2BE393JY	X	39k	1/8W	Carbon	AA
R775	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R776	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R778	VRS-RG3AB271J+	X	270	1W	Metal Oxide	AB
R781	VRS-CY1JF472JY	X	4.7k	1/16W	Metal Oxide	AA
R782	VRS-CY1JF393JY	X	39k	1/16W	Metal Oxide	AA
R784	VRS-RG3AB391J+	X	390	1W	Metal Oxide	AB
R801	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R802	VRS-CY1JF471JY	X	470	1/16W	Metal Oxide	AA
R803	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R805	VRS-CY1JF682JY	X	6.8k	1/16W	Metal Oxide	AA
R806	VRS-CY1JF681JY	X	680	1/16W	Metal Oxide	AA
R807	VRS-CY1JF681JY	X	680	1/16W	Metal Oxide	AA
R808	VRS-CY1JF681JY	X	680	1/16W	Metal Oxide	AA
R810	VRS-CY1JF472JY	X	4.7k	1/16W	Metal Oxide	AA
R903	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R904	VRS-CY1JF683JY	X	68k	1/16W	Metal Oxide	AA
R905	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R906	VRD-RA2BE332JY	X	3.3k	1/8W	Carbon	AA
R907	VRS-CY1JF152JY	X	1.5k	1/16W	Metal Oxide	AA
R908	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R910	VRD-RA2BE102JY	X	1k	1/8W	Carbon	AA
R911	VRS-CY1JF683JY	X	68k	1/16W	Metal Oxide	AA
R912	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R913	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R914	VRS-CY1JF152JY	X	1.5k	1/16W	Metal Oxide	AA
R915	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R916	VRS-CY1JF683JY	X	68k	1/16W	Metal Oxide	AA
R917	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R918	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R922	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R923	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R924	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R925	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R926	VRS-CY1JF680JY	X	68	1/16W	Metal Oxide	AA
R927	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R929	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R930	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R931	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R932	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R933	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R934	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R935	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R936	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R937	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R938	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R939	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R940	VRS-CY1JF8R2JY	X	8.2	1/16W	Metal Oxide	AA
R941	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R942	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R943	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R944	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R945	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R946	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R947	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R948	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R949	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R950	VRS-CY1JF560JY	X	56	1/16W	Metal Oxide	AA
R951	VRD-RA2BE680JY	X	68	1/8W	Carbon	AA
R952	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R953	VRS-CY1JF220JY	X	22	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★		Description		Code
R954	VRS-CY1JF221JY	X	220	1/16W	Metal Oxide	AA
R955	VRS-CY1JF221JY	X	220	1/16W	Metal Oxide	AA
R957	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R958	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R959	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R960	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R961	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R962	VRS-CY1JF332FY	X	3.3k	1/16W	Metal Oxide	AA
R963	VRD-RA2BE101JY	X	100	1/8W	Carbon	AA
R964	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R967	VRS-CY1JF682JY	X	6.8k	1/16W	Metal Oxide	AA
R968	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R969	VRS-CY1JF472FY	X	4.7k	1/16W	Metal Oxide	AA
R970	VRD-RA2BE6R8JY	X	6.8	1/8W	Carbon	AA
R971	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R972	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R973	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R974	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R975	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R982	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R983	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R984	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R1101	VRS-CY1JF393JY	X	39k	1/16W	Metal Oxide	AA
R1102	VRS-CY1JF152JY	X	1.5k	1/16W	Metal Oxide	AA
R1103	VRS-CY1JF470JY	X	47	1/16W	Metal Oxide	AA
R1104	VRS-CY1JF393JY	X	39k	1/16W	Metal Oxide	AA
R1105	VRS-CY1JF393JY	X	39k	1/16W	Metal Oxide	AA
R1106	VRS-CY1JF333FY	X	33k	1/16W	Metal Oxide	AA
R1107	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R1108	VRS-CY1JF333FY	X	33k	1/16W	Metal Oxide	AA
R1109	VRS-CY1JF153FY	X	15k	1/16W	Metal Oxide	AA
R1111	VRS-CY1JF104FY	X	100k	1/16W	Metal Oxide	AA
R1112	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1113	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1114	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1115	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1116	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1118	VRS-CY1JF470JY	X	47	1/16W	Metal Oxide	AA
R1119	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1120	VRS-CY1JF470JY	X	47	1/16W	Metal Oxide	AA
R1121	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1122	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1123	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1124	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1125	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1126	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1128	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1130	VRN-RL3DB1R0J+	X	1	2W	Metal Film	AB
R1131	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1132	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R1136	VRS-CY1JF104JY	X	100k	1/16W	Metal Oxide	AA
R1137	VRS-CY1JF823JY	X	82k	1/16W	Metal Oxide	AA
R1140	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R1141	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R1142	VRS-CY1JF750JY	X	75	1/16W	Metal Oxide	AA
R1143	VRS-CY1JF104JY	X	100k	1/16W	Metal Oxide	AA
R1144	VRS-CY1JF104JY	X	100k	1/16W	Metal Oxide	AA
R1145	VRS-CY1JF472JY	X	4.7k	1/16W	Metal Oxide	AA
⚠ R1420	VRN-RL3LB2R7J+	X	2.7	3W	Metal Film	AC
R2001	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R2004	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2008	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R2010	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R2013	VRS-CY1JF682JY	X	6.8k	1/16W	Metal Oxide	AA
R2021	VRS-CY1JF334JY	X	330k	1/16W	Metal Oxide	AA
R2023	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2024	VRS-CY1JF472JY	X	4.7k	1/16W	Metal Oxide	AA
R2025	VRS-CY1JF472JY	X	4.7k	1/16W	Metal Oxide	AA
R2026	VRS-CY1JF472JY	X	4.7k	1/16W	Metal Oxide	AA
R2027	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R2028	VRD-RA2BE102JY	X	1k	1/8W	Carbon	AA
R2031	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R2032	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2033	VRS-CY1JF334JY	X	330k	1/16W	Metal Oxide	AA
R2034	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2040	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★		Description		Code
R2041	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R2042	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2043	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R2045	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R2046	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2047	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2048	VRS-CY1JF562JY	X	5.6k	1/16W	Metal Oxide	AA
R2051	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2054	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R2060	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2061	VRS-CY1JF562JY	X	5.6k	1/16W	Metal Oxide	AA
R2062	VRS-CY1JF223JY	X	22k	1/16W	Metal Oxide	AA
R2063	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R2064	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R2084	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R2085	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2086	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2087	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2088	VRS-CY1JF224JY	X	220k	1/16W	Metal Oxide	AA
R2089	VRS-CY1JF273JY	X	27k	1/16W	Metal Oxide	AA
R2090	VRS-CY1JF682JY	X	6.8k	1/16W	Metal Oxide	AA
R2092	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2093	VRS-CY1JF224JY	X	220k	1/16W	Metal Oxide	AA
R2094	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R2095	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2096	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2101	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2102	VRS-CY1JF101JY	X	100	1/16W	Metal Oxide	AA
R2201	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R2202	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R2203	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R2211	VRS-CY1JF222JY	X	2.2k	1/16W	Metal Oxide	AA
R2212	VRS-CY1JF682JY	X	6.8k	1/16W	Metal Oxide	AA
R2213	VRS-CY1JF333JY	X	33k	1/16W	Metal Oxide	AA
R2401	VRD-RA2BE101JY	X	100	1/8W	Carbon	AA
R2402	VRD-RA2BE101JY	X	100	1/8W	Carbon	AA
R2403	VRD-RA2BE101JY	X	100	1/8W	Carbon	AA
R2404	VRD-RA2BE101JY	X	100	1/8W	Carbon	AA
R2501	VRS-CY1JF183JY	X	18k	1/16W	Metal Oxide	AA
R2502	VRS-CY1JF183JY	X	18k	1/16W	Metal Oxide	AA
R2503	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R2504	VRS-CY1JF103JY	X	10k	1/16W	Metal Oxide	AA
R2505	VRD-RA2BE822JY	X	8.2k	1/8W	Carbon	AA
R2506	VRD-RA2BE822JY	X	8.2k	1/8W	Carbon	AA
R2507	VRD-RA2BE183JY	X	18k	1/8W	Carbon	AA
R2508	VRD-RA2BE183JY	X	18k	1/8W	Carbon	AA
R2509	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R2601	VRD-RA2BE100JY	X	10	1/8W	Carbon	AA
R2603	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R2605	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R2606	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R3001	VRS-CY1JF221JY	X	220	1/16W	Metal Oxide	AA
R3002	VRS-CY1JF221JY	X	220	1/16W	Metal Oxide	AA
R3003	VRS-CY1JF105JY	X	1M	1/16W	Metal Oxide	AA
R3004	VRS-CY1JF104JY	X	100k	1/16W	Metal Oxide	AA
R3005	VRS-CY1JF623JY	X	62k	1/16W	Metal Oxide	AA
R3007	VRS-CY1JF332JY	X	3.3k	1/16W	Metal Oxide	AA
R3008	VRS-CY1JF302JY	X	3k	1/16W	Metal Oxide	AA
R3010	VRS-CY1JF392JY	X	3.9k	1/16W	Metal Oxide	AA
R3011	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R3012	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R3017	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R3018	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R3024	VRD-RA2BE102JY	X	1k	1/8W	Carbon	AA
R3027	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R3029	VRS-CY1JF153JY	X	15k	1/16W	Metal Oxide	AA
R3030	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R3031	VRS-CY1JF474JY	X	470k	1/16W	Metal Oxide	AA
R3032	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R3033	VRS-CY1JF474JY	X	470k	1/16W	Metal Oxide	AA
R3034	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R3035	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R3036	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R3037	VRS-CY1JF153JY	X	15k	1/16W	Metal Oxide	AA
R3038	VRS-CY1JF473JY	X	47k	1/16W	Metal Oxide	AA
R3039	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
SWITCHES				
S2501	QSW-K0003AJZZ+	X	Switch, POWER	AB
S2502	QSW-K0003AJZZ+	X	Switch, MENU	AB
S2503	QSW-K0003AJZZ+	X	Switch, VOL.-DOWN	AB
S2504	QSW-K0003AJZZ+	X	Switch, VOL.-UP	AB
S2505	QSW-K0003AJZZ+	X	Switch, CH-DOWN	AB
S2506	QSW-K0003AJZZ+	X	Switch, CH-UP	AB
BALUNES				
FB601	RBLN-0047CEZZY	X	Balun	AB
FB706	RBLN-0037CEZZY	X	Balun	AA
FB707	RBLN-0020CEZZ+	X	Balun	AB
FB1103	RBLN-0210TAZZY	X	Balun	AB
FB1104	RBLN-0210TAZZY	X	Balun	AB
FB2001	RBLN-0037CEZZY	X	Balun	AA
MISCELLANEOUS PARTS				
⚠ ACC701	QACCDA012WJPZ	X	AC Cord	AH
⚠ F701	QFS-B4023CEZZ	X	Fuse, 4A, 125V	AC
FH701	QFSHD1013CEZZ+	X	Fuse Holder	AA
FH702	QFSHD1014CEZZ+	X	Fuse Holder	AA
J904	QJAKGA023WJZZ	X	Jack, Front AV IN JACK	AD
J921	QSOCD0456CEZZ	X	Y/C Connector Socket	AD
J1401	QTANJ1101SEZZ	X	Terminal, AV IN/OUT	AH
P361	QPLGN0461CEZZA	X	Plug, 4pin	AB
P401	QPLGN0861CEZZA	X	Plug, 8pin (J)	AC
P605	QPLGN0160FJZZ	X	Plug, 5pin	AC
P621	QPLGN0761CEZZA	X	Plug, 7pin (N)	AC
P651	QPLGN0361CEZZA	X	Plug, 3pin	AB
P702	QPLGN0269GEZZ	X	Plug, 2pin	AB
P703	QPLGN0260CEZZ	X	Plug, 2pin	AB
P721	QPLGN0461CEZZA	X	Plug, 4pin (DT)	AB
P722	QPLGN0461CEZZA	X	Plug, 4pin (DT)	AB
P1101	QPLGN0561CEZZA	X	Plug, 6pin	AB
P2401	QPLGN0661CEZZA	X	Plug, 6pin	AB
⚠ RDA361	PRDAR0258PEFW	X	Heat Sink for IC361	AE
⚠ RDA501	PRDARA039WJFW	X	Heat Sink for IC501	AF
⚠ RDA601	PRDARA041WJFW	X	Heat Sink for Q602	AF
RDA671	PRDARA057WJFW	X	Heat Sink for Q673	AE
⚠ RDA701	PRDAR0279PEFW	X	Heat Sink for Q701	AD
RDA750	PRDAR5072CEFW	X	Heat Sink for IC751	AC
RDA1101	PRDAR5072CEFW	X	Heat Sink for IC1104	AC
RDA1102	PRDAR5072CEFW	X	Heat Sink for IC1102	AC
RDA1403	PRDAR5072CEFW	X	Heat Sink for IC1403	AC
RMC2601	RRMCUA022WJZZ	X	Remote Receiver	AE
⚠ RY701	RRLYJ0081CEZZ	X	Relay	AE
RY702	RRLYJ0088CEZZ	X	Relay	AE
TP701	QLUGP0102PEZZ	X	Lug	AA

DUNTKA527WEE4
PWB-B CRT UNIT

Ref. No.	Part No.	★	Description	Code
INTEGRATED CIRCUIT				
⚠ IC850	VHiTDA6103Q-1	X	TDA6103Q/N3	AK
TRANSISTORS				
Q850	VS2SA1266-Y-1+	X	2SA1266-Y	AB
Q851	VS2SC3198-G-1+	X	2SC3198-G	AB
Q1504	VS2SC3198-G-1+	X	2SC3198-G	AB
Q1505	VS2SA1266-Y-1+	X	2SA1266-Y	AB
Q1506	VS2SA2005++1E	X	2SA2005++	AD
Q1507	VS2SC5511++1E	X	2SC5511++	AD
DIODES				
D850	RH-DX0220CEZZY	X	DX0220CE	AB
D851	RH-DX0220CEZZY	X	DX0220CE	AB
D852	RH-DX0220CEZZY	X	DX0220	AB
D853	RH-EX0647GEZZY	X	Zenre Diode, 15V	AB
D854	VHD1SS119//-1Y	X	1SS119	AA
D855	VHD1SS119//-1Y	X	1SS119	AA
D862	VHD1SS119//-1Y	X	1SS119	AA
D1502	VHD1SS119//-1Y	X	1SS119	AA
D1503	VHD1SS119//-1Y	X	1SS119	AA
D1506	RH-DX0487CEZZY	X	DX0487CE	AC
D1507	RH-DX0487CEZZY	X	DX0487CE	AC
D1510	VHD1SS119//-1Y	X	1SS119	AA

Ref. No.	Part No.	★	Description			Code
CAPACITORS						
C850	VCFYSB2EB224K	X	0.22	250V	Mylar	AC
C851	RC-KZ018JCEZZ	X	0.01	AC250V	Ceramic	AB
C852	VCEA0A1CW107M+X		100	16V	Electrolytic	AA
C853	VCFYFA1HA224J+	X	0.22	50V	Electrolytic	AB
C854	VCEA0A1CW227M+X		220	16V	Electrolytic	AB
C855	VCEA0A2EW106M+X		10	250V	Electrolytic	AC
C856	VCEA0A1HW226M+X		22	50V	Electrolytic	AA
C1501	VCEA0A1CW476M+X		47	16V	Electrolytic	AA
C1506	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C1508	VCKYPA2HB472K+	X	4700p	500V	Ceramic	AB
C1509	VCKYPA1HB472K+	X	4700p	50V	Ceramic	AA
C1510	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C1511	VCKYPA1HF103Z+	X	0.01	50V	Ceramic	AA
C1515	VCEA0A1HW476M+X		47	50V	Electrolytic	AB
C1516	VCEA0A1HW476M+X		47	50V	Electrolytic	AB
C1517	VCEA0A2AW106M+X		10	100V	Electrolytic	AB
C1518	VCCSPA2HL560K+	X	56p	500V	Ceramic	AB
C1519	VCEA0A2CW106M+X		10	160V	Electrolytic	AC
RESISTORS						
⚠ R850	VRS-SV2HC152J	X	1.5k	1/2W	Metal Oxide	AA
⚠ R851	VRS-SV2HC152J	X	1.5k	1/2W	Metal Oxide	AA
⚠ R852	VRS-SV2HC152J	X	1.5k	1/2W	Metal Oxide	AA
⚠ R853	VRS-SV2HC272J	X	2.7k	1/2W	Metal Oxide	AA
⚠ R854	VRS-SV2HC272J	X	2.7k	1/2W	Metal Oxide	AA
⚠ R855	VRS-SV2HC272J	X	2.7k	1/2W	Metal Oxide	AA
R856	VRD-RM2HD104JY	X	100k	1/2W	Carbon	AA
R857	VRD-RM2HD104JY	X	100k	1/2W	Carbon	AA
R858	VRD-RM2HD104JY	X	100k	1/2W	Carbon	AA
R861	VRD-RM2HD104JY	X	100k	1/2W	Carbon	AA
R862	VRC-MA2HG152KY	X	1.5k	1/2W	Solid	AB
R863	VRC-MA2HG152KY	X	1.5k	1/2W	Solid	AB
R864	VRC-MA2HG152KY	X	1.5k	1/2W	Solid	AB
⚠ R867	VRS-SV2HC392J	X	3.9k	1/2W	Metal Oxide	AA
⚠ R868	VRS-SV2HC682J	X	6.8k	1/2W	Metal Oxide	AA
R869	VRD-RA2BE103JY	X	10k	1/8W	Carbon	AA
R870	VRD-RA2BE223JY	X	22k	1/8W	Carbon	AA
R871	VRD-RA2BE472JY	X	4.7k	1/8W	Carbon	AA
R872	VRD-RA2EE680JY	X	68	1/4W	Carbon	AA
R873	VRD-RM2HD224JY	X	220k	1/2W	Carbon	AA
R874	VRD-RM2HD104JY	X	100k	1/2W	Carbon	AA
R875	VRD-RM2HD104JY	X	100k	1/2W	Carbon	AA
R876	VRD-RM2HD104JY	X	100k	1/2W	Carbon	AA
R877	VRD-RA2BE103JY	X	10k	1/8W	Carbon	AA
⚠ R878	VRS-SV2HC120J	X	12	1/2W	Metal Oxide	AA
R1511	VRD-RA2BE101JY	X	100	1/8W	Carbon	AA
⚠ R1513	VRS-VV3DB561J	X	560	2W	Metal Oxide	AA
R1514	VRD-RA2BE100JY	X	10	1/8W	Carbon	AA
R1515	VRD-RA2BE820JY	X	82	1/8W	Carbon	AA
R1516	VRD-RA2BE820JY	X	82	1/8W	Carbon	AA
R1517	VRD-RA2BE122JY	X	1.2k	1/8W	Carbon	AA
R1518	VRD-RA2BE683JY	X	68k	1/8W	Carbon	AA
R1519	VRD-RA2BE123JY	X	12k	1/8W	Carbon	AA
R1520	VRD-RA2BE683JY	X	68k	1/8W	Carbon	AA
R1521	VRD-RA2BE122JY	X	1.2k	1/8W	Carbon	AA
R1525	VRD-RA2EE560JY	X	56	1/4W	Carbon	AA
R1526	VRD-RA2EE560JY	X	56	1/4W	Carbon	AA
R1527	VRD-RM2HD1R5JY	X	1.5	1/2W	Carbon	AA
R1528	VRD-RM2HD1R5JY	X	1.5	1/2W	Carbon	AA
⚠ R1529	VRS-VV3DB221J	X	220	2W	Metal Oxide	AA
R1530	VRD-RA2BE122JY	X	1.2k	1/8W	Carbon	AA

Ref. No.	Part No.	★	Description	Code
MISCELLANEOUS PARTS				
FB1501	RBLN-0020CEZZ+	X	Balun	AB
P854	QPLGN0741CEZZ	X	Plug, 7pin (N)	AB
P860	QPLGN0841CEZZ	X	Plug, 8pin (J)	AB
⚠ P861	QPLGN0241CEZZ	X	Plug, 2pin	AA
⚠ RDA850	PRDAR0248PEFW	X	Heat Sink for IC850	AD

Ref. No.	Part No.	★	Description	Code
RDA1506	PRDAR5072CEFW	X	Heat Sink for Q1560	AC
RDA1507	PRDAR5072CEFW	X	Heat Sink for Q1507	AC
SC850	QSOCV1011CEZZ	X	Socket 12 CRT SOCKRT	AE

DUNTKB572WEV0
PWB-D 2-LINE Y/C UNIT

INTEGRATED CIRCUIT

IC1401	VHiTC90A45F-1Y	X	TC90A45F	AM

TRANSISTORS

Q1401	VS2SD601AR/-1Y	X	2SD601AR	AB
Q1402	VS2SD601AR/-1Y	X	2SD601AR	AB
Q1404	VS2SB709AR/-1Y	X	2SB709AR	AB

COILS

L1401	VP-XF100K0000Y	X	Peaking, 10μH	AA
L1402	VP-XF100K0000Y	X	Peaking, 10μH	AA
L1403	VP-XF100K0000Y	X	Peaking, 10μH	AA
L1404	VP-XF220K0000Y	X	Peaking, 22μH	AA
L1405	VP-XF220K0000Y	X	Peaking, 22μH	AA
L1408	VP-XF100K0000Y	X	Peaking, 10μH	AA

CAPACITORS

C1401	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1402	VCEA0A1AW227M+	X	220	10V	Electrolytic	AB
C1403	VCCCCY1HH330JY	X	33p	50V	Ceramic	AA
C1404	VCCCCY1HH181JY	X	180p	50V	Ceramic	AA
C1405	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1406	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1407	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1408	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1409	VCEA0A1CW476M+	X	47	16V	Electrolytic	AA
C1410	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1411	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1412	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1413	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1414	VCE9GA1HW105M+	X	1	50V	Electrolytic, (N.P)	AB
C1415	VCCCCY1HH120JY	X	12p	50V	Ceramic	AA
C1416	VCCCCY1HH3R0CYX		3p	50V	Ceramic	AA
C1417	VCCCCY1HH270JY	X	27p	50V	Ceramic	AA
C1418	VCCCCY1HH120JY	X	12p	50V	Ceramic	AA
C1419	VCCCCY1HH3R0CYX		3p	50V	Ceramic	AA
C1420	VCCCCY1HH270JY	X	27p	50V	Ceramic	AA
C1423	VCFYFA1HA474J+	X	0.47	50V	Mylar	AB
C1424	VCEA0A1CW107M+	X	100	16V	Electrolytic	AA
C1425	VCCCCY1HH820JY	X	82p	50V	Ceramic	AA
C1429	VCEA0A1CW107M+	X	100	16V	Electrolytic	AA
C1430	VCKYCY1CB104KY	X	0.1	16V	Ceramic	AA
C1431	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA
C1432	VCKYCY1HB103KY	X	0.01	50V	Ceramic	AA

RESISTORS

R1401	VRS-CY1JF821JY	X	820	1/16W	Metal Oxide	AA
R1402	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R1403	VRS-CY1JF361JY	X	360	1/16W	Metal Oxide	AA
R1415	VRS-CY1JF391JY	X	390	1/16W	Metal Oxide	AA
R1416	VRS-CY1JF102JY	X	1k	1/16W	Metal Oxide	AA
R1417	VRS-CY1JF152JY	X	1.5k	1/16W	Metal Oxide	AA
R1421	VRS-CY1JF152FY	X	1.5k	1/16W	Metal Oxide	AA
R1423	VRS-CY1JF102FY	X	1k	1/16W	Metal Oxide	AA
R1427	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R1428	VRD-RA2BE332JY	X	3.3k	1/8W	Carbon	AA
R1429	VRS-CY1JF000JY	X	0	1/16W	Metal Oxide	AA
R1430	VRS-CY1JF151JY	X	150	1/16W	Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

MISCELLANEOUS PARTS

P1401	QPLGZ0810CEZZ	X	Plug, 8pin (CA)	AD

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
SP1	VSP1206PB708A	X	Speaker (L)	AL
SP2	VSP1206PB708A	X	Speaker (R)	AL
	QCNW-B020WJZZ	X	Connecting Cord	AE
	QCNW-B021WJZZ	X	Connecting Cord	AE
	QCNW-B022WJZZ	X	Connecting Cord	AE
	QCNW-E217WJPZ	X	Connecting Cord	AE

SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
X1	RRMCGA447WJSA	X	Infrared Remote Control Unit	AT
X2	TINS-C461WJZZ	X	Operation Manual	AG
	TGAN-A216WJN1	X	Guarantee Card	AC

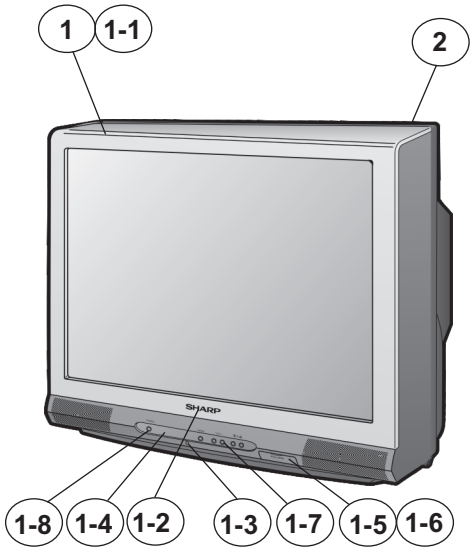
PACKING PARTS *(NOT REPLACEMENT ITEM)*

Ref. No.	Part No.	★	Description	Code
S1	SPAKCC676WJZZ	X	Packing Case	AY
S2	SPAKX0132GJZZ	X	Buffer Material	AU
S3	SPAKP0109GJZZ	X	Wrapping Sheet	AF
S4	SSAKA0101GJZZ	X	Wrapping Sack	AC

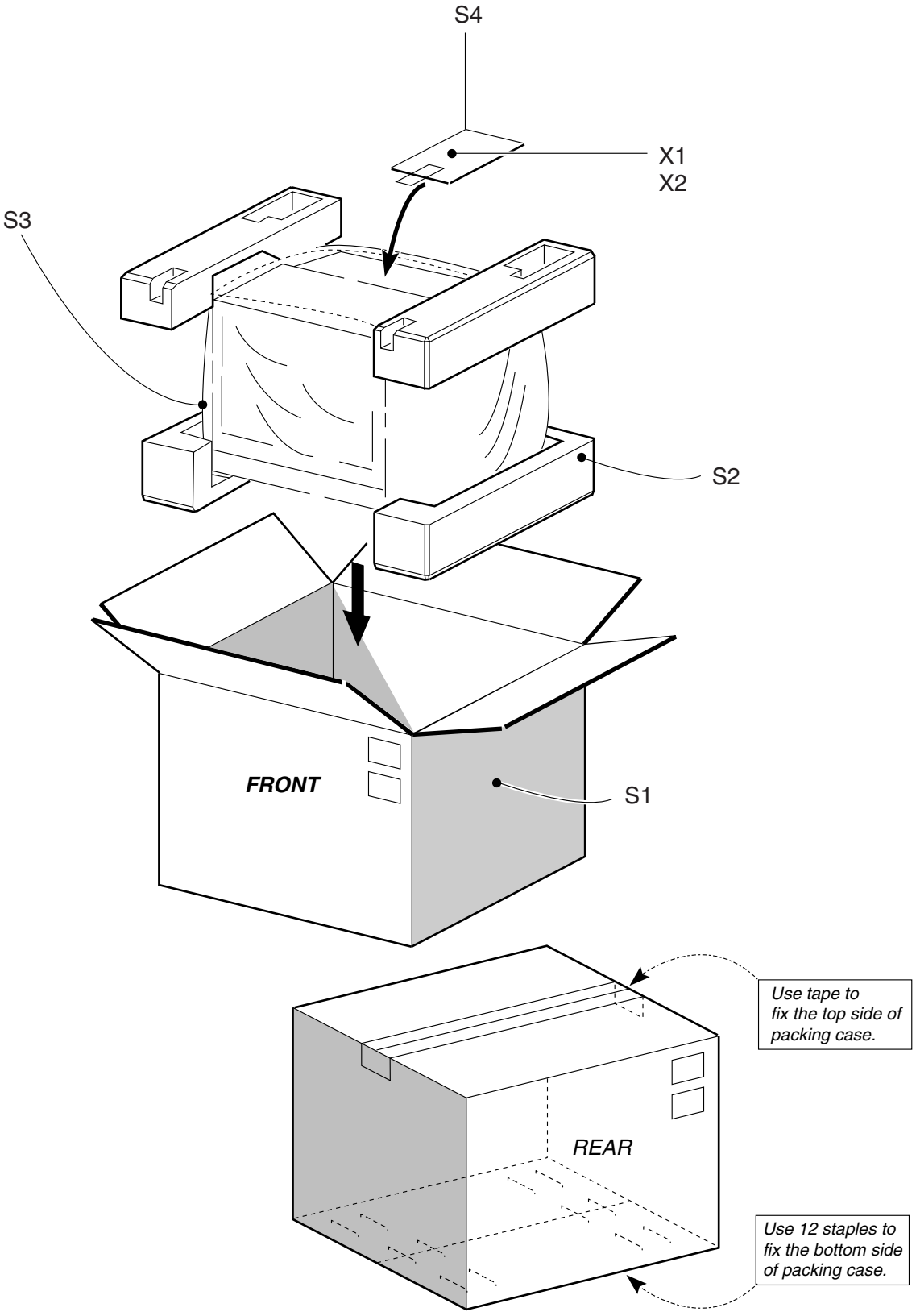
CABINET PARTS

Ref. No.	Part No.	★	Description	Code
1	CCABAB415WEH0	X	CAB-A ASSY	BN
1-1	*Not Available*	—	*Front Cabinet*	
1-2	HBDGB3141CESA	X	BADGE	AF
1-3	HDECQ0105GJSA	X	R/C COVER	AD
1-4	HDECQ0104GJKA	X	SPEAKER DECORATION	AH
1-5	HINDP0107GJSA	X	INDICATION PLATE	AC
1-6	GDORF0105GJKH	X	DOOR	
1-7	JBTN-0129GJKA	X	BUTTON (POWER)	AD
1-8	JBTN-0128GJKA	X	BUTTON	AF
2	GCABBA843WJKA	X	REAR CABINET	BD

CABINET PARTS LOCATION



PACKING OF THE SET



SHARP

COPYRIGHT © 2006 BY SHARP CORPORATION

ALL RIGHTS RESERVED.

No part of this publication may be reproduced,
stored in a retrieval system, or transmitted in
any form or by any means, electronic, mechanical,
photocopying, recording, or otherwise, without
prior written permission of the publisher.

QRC0032-U
April. 2006
Modify : SEMEX

Design and Production Information
Design base : SEM
Production : SEMEX

J B

SHARP ELECTRONICA MEXICO S. A. DE C. V.
Quality & Reliability Control Center
Blvd. SHARP No. 3510 Parque Industrial Rosarito
Playas de Rosarito, México B. C. 22710